

We are dedicated to providing you with quality support and customer service. If you have questions or difficulties, we would like to hear from you.

TROUBLESHOOTING

Check the Troubleshooting section of this document and of the *Installation Guide* that came with your Recorder.

CONTACT CUSTOMER SUPPORT

Should this Recorder require service in the U.S.A. and you wish to locate the nearest Pioneer Authorized Independent Service Company, or if you wish to purchase replacement parts, operating instructions, service manuals, or accessories, please call the number shown below.

1-800-421-1404

Please do not ship your Recorder to Pioneer without first calling the Customer Support Division at the above listed number for assistance.

Pioneer Electronics (USA) Inc.
Customer Support Division
P.O. BOX 1760, Long Beach
CA 90810-1760, U.S.A.

To upgrade to TiVo Plus™ service, visit www.tivo.com/upgrade. For questions about TiVo Plus service, visit www.tivo.com/support.

PIONEER CORPORATION

4-1, Meguro 1-Chome, Meguro-ku, Tokyo 153-8654, Japan

PIONEER ELECTRONICS (USA) INC.

P.O. BOX 1540, Long Beach, California 90810-1540, U.S.A. TEL: (800) 421-1404

VRB1323-A



Pioneer DVD Recorder with TiVo® User's Guide

SERIES 2™

RW
COMPATIBLE

User's Guide

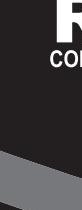
Pioneer

sound. vision. soul

Register your Recorder at www.pioneerelectronics.com

The TiVo Menus and the Remote Control

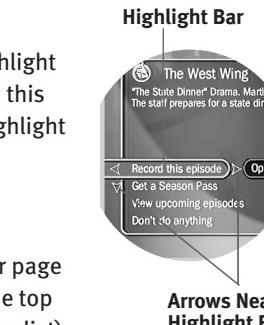
Arrow Buttons



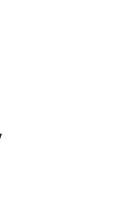
You use the TiVo service by choosing items from simple menus. To select an item, use the remote control's arrow buttons to move the highlight bar onto the item you want, then press SELECT.

Two Types of Arrows:

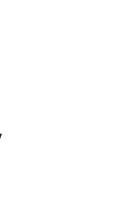
The arrows that appear beside or near the highlight bar show possible directions. For example: on this screen, you could press the RIGHT arrow to highlight Options or the DOWN arrow to highlight Get a Season Pass.



Page Up Arrow



Page Down Arrow



When you see page up or page down arrows (▲ ▼) at the top or bottom of a screen (or a list), press the CHAN UP/DOWN button to jump to more items an entire page at a time.



Chan Up/Down
Button

Pioneer DVD Recorder with TiVo®

© 2003 by TiVo Inc. and Pioneer Corporation. Reproduction in whole or in part without written permission is prohibited. All rights reserved. Printed in Japan.

PIONEER is a registered trademark of Pioneer Corporation, 1-4-1, Meguro, Meguro-Ku, Tokyo 153-8654, Japan.

TiVo, the TiVo logo, Ipreview, TiVolution, the Jump logo, and TiVo Central are registered trademarks of TiVo Inc. Primetime Anytime; “TiVo, TV your way”; Season Pass; WishList; Overtime Scheduler; Home Media Option; TiVo Basic; TiVo Plus; the Series2 logo; the Instant Replay logo; the Thumbs Down logo and text; and the Thumbs Up logo and text are trademarks of TiVo Inc., 2160 Gold Street, P.O. Box 2160, Alviso, CA 95002-2160.

VCR Plus+ and PlusCode are registered trademarks of Gemstar Development Corporation. The VCR Plus+ system is manufactured under license from Gemstar Development Corporation.

“DTS” and “DTS Digital Out” are registered trademarks of Digital Theater Systems, Inc.

Manufactured under license from Dolby Laboratories.

“Dolby” and the double-D symbol are trademarks of Dolby Laboratories.

All other trademarks are the properties of their respective owners.

Pioneer takes no responsibility for recording failure due to power cuts, defective discs, or damage to the Recorder. Some content may not be copied due to copy protection rights over the material.

Macrovision Copyright Protection

This product incorporates copyright protection technology that is protected by method claims of certain U.S. patents and other intellectual property rights owned by Macrovision Corporation and other rights owners. Use of this copyright protection technology must be authorized by Macrovision Corporation, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision Corporation. Reverse engineering or disassembly is prohibited.

► Welcome!

Congratulations on your purchase of your Pioneer DVD Recorder with TiVo®, and welcome to the wonderful world of digital video recording with TiVo! The Recorder seamlessly integrates a DVD recorder and a TiVo DVR. Right out of the box, it comes with TiVo Basic™ service, so you can immediately enjoy the following benefits:

- **No videotapes required.** Because it's all-digital, TiVo saves your recorded programs on a hard drive and lists them on-screen for instant playback.
- **Control live TV.** Pause, rewind, slow-motion, and instant replay any channel, anytime.
- **Record from program guide.** An on-screen interactive program guide includes detailed program summaries, ratings, and more, and lets you schedule recordings on the spot.
- **Play DVDs/CDs and record DVDs.** Play DVDs/CDs just as you would expect, plus create DVDs of programs you recorded with the TiVo service.

But TiVo Basic is just the beginning! You can also upgrade to TiVo Plus™ service and enjoy benefits of smart, automatic-recording technology. TiVo Plus includes:

- **Season Pass™ recordings.** Automatically record every episode of your favorite series, all season long, even if the schedule changes.
- **Search by Title.** Browse for shows by title, or by actor, director or keyword using WishList™ searches.
- **More smart features.** TiVo Plus skips reruns, tracks schedule changes, and more!

Not sure? For a limited time, you can try TiVo Plus service simply by accepting our **free trial** once you get set up. You won't be charged a penny until you upgrade to TiVo Plus service (either online at the TiVo web site or by calling TiVo direct).

Meanwhile, enjoy the ease and convenience of your Pioneer DVD Recorder with TiVo!

Pioneer
sound. vision. soul



TiVo, TV your way.™

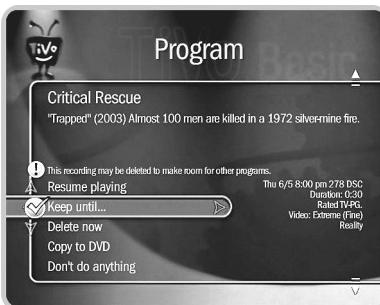
► Table of Contents

Using This Guide	vi
► Chapter 1: Guided Setup	1
TiVo Basic	2
Completing Guided Setup	3
► Chapter 2: The Basics in 5 Short Tours	9
Tour One: Play with Live TV	10
Tour Two: Find and Record Programs	12
Tour Three: Now Playing and Copy* To DVD	14
Tour Four: Playing a DVD or CD	16
Tour Five: Finding New Programs	18
Cool Things You Can Do	19
► Chapter 3: Playing and Recording Programs	21
TiVo Central	22
Recording Programs	23
To Do List	28
Watching Programs in Now Playing	29
► Chapter 4: Playing DVDs and CDs	31
Compatibility and Copy Protected Material	32
Playing a DVD or CD	36
Recording a DVD	42
Disc Care	45

▶ Chapter 5: Messages & Setup	47
Messages	48
Settings	49
System Information	67
Troubleshooting	67
Restart or Reset System	68
Sleep	69
▶ Chapter 6: Features of TiVo Plus	71
Introduction	72
Recording Programs	73
Finding Your Favorite Programs	79
Finding Programs That Match Your Interests	84
Finding New Programs	90
Grouping & Sorting Programs in Now Playing	92
Copying Programs to a VCR	93
▶ Chapter 7: Home Media Option	95
▶ Chapter 8: Connecting to a Home Network	101
▶ Chapter 9: Troubleshooting	117
▶ Chapter 10: Privacy and Service	147
▶ Appendix A: Linux Information	165
▶ Index	171



You will see important and helpful notes and tips in this side column.



This is a Program Information screen. It has a description of the program and a list of actions you can select. On a Program Information screen, press INFO to see the Program Details screen, which often has even more information about the program, such as actors, writers, producers, etc.



Notes at the bottom of some pages show you how to find the screen being described. For example, page 28 describes the To Do List. At the bottom of the page you see TiVo Central > Pick Programs to Record > To Do List. This note means you can find the To Do List by going to TiVo Central, selecting Pick Programs to Record, then To Do List.

► Using This Guide

► Getting Started

1. Connect your Recorder using the *Start Here* booklet and the *Installation Guide*.
2. Complete Guided Setup following the steps provided in Chapter 1 of this guide.

When you've finished these two steps, you're ready to use the TiVo Basic service. Take the tours in Chapter 2 of this guide, then read Chapters 3, 4, and 5.

Basic terms. The following are definitions of some basic terms used in this guide:

DVR. Your Pioneer DVD Recorder with TiVo is both a TiVo Digital Video Recorder (DVR) and a DVD recorder. Because they refer to those features of the Recorder that are part of the TiVo service (either TiVo Basic or TiVo Plus service), the Privacy Policy and Service Agreements (page 147) use the term DVR to refer to the Recorder.

Live TV. If you're watching a program as it's being broadcast, you're watching live TV. With TiVo, you can also watch recorded programs or watch "behind" live TV (for example: if you pause live TV, then come back later and watch from the paused spot).

Icons. These are graphic symbols used by the TiVo service to provide information about options you can select. You'll find a glossary of icons on the inside back cover.

Program Information screen. With TiVo Basic, you see Program Information screens when you select titles in Now Playing or the To Do List. From the Program Information screen, you can select actions and view a description of the program. With TiVo Plus, the Program Information screen is available whenever you select a program from a list.

Service Terms. This *User's Guide* refers to both the TiVo Basic service and the TiVo Plus service. For purposes of convenience only, the term "TiVo service" is sometimes used to refer to information that applies to both TiVo Basic and TiVo Plus.

CHAPTER

1

Guided Setup

TiVo Basic

2

Completing Guided Setup

3

►► TiVo Basic

 You've made the right choice in your purchase of a Pioneer DVD Recorder with TiVo. The TiVo service's ease of use and reliability set it apart from other recorders. With TiVo, it's always easy to save the programs you want to save and still be sure there's room to record new favorites. The TiVo service puts you in control.

 Your TiVo service number is a fifteen digit number you can find on the System Information screen (from TiVo Central select Messages & Setup then System Information) or on a label on the back panel of your Recorder.

Welcome to the TiVo Basic service. The TiVo Basic service allows you to control live TV and record programs on a specific channel at a specific time, much like a VCR. It also includes an on-screen interactive program guide that provides up to three days of information on your favorite upcoming programs. In addition, Showcases and TiVolution Magazine help you get more out of your TV time. No further TiVo service activation is necessary to enjoy the features of TiVo Basic service.

★ Upgrade to TiVo Plus

But TiVo Basic is just the beginning! You can also upgrade to TiVo Plus service and enjoy the benefits of smart, automatic-recording technology. TiVo Plus brings you features such as:

- **Season Pass recordings.** Automatically record every episode of your favorite series, all season long, even if the schedule changes.
- **WishList™ searches.** Find and record programs by actor, director, sports team, etc.
- **Search by Title.** Browse for shows by title, filter by genre (like “Comedy”), and more.
- **Interactive 14-day program guide.** Instantly schedule recordings from an on-screen guide that includes detailed show summaries, ratings, etc.
- **More smart features.** TiVo Plus skips reruns, tracks schedule changes, and more!

Not sure? For a limited time, you can try TiVo Plus service simply by accepting our **free trial** after you get set up. It's at the bottom of TiVo Central. You won't be charged a penny until you upgrade to TiVo Plus service via the TiVo web site (www.tivo.com/upgrade) or by calling TiVo directly at 1-877-367-8486. To upgrade to TiVo Plus service, you will need the TiVo service number found on the back panel of your Recorder.

► Completing Guided Setup

After connecting your Recorder to your TV, you need to complete Guided Setup, which should take less than one hour. (For more information about connecting your Recorder, see the *Start Here* booklet and the *Installation Guide*.)

- **Guided Setup is easy.** The Guided Setup screens step you through the process. If you get stuck, look through this chapter for help. (You may not see all the screens described here, or you may see them in a different order, depending on your equipment.)

If you make a mistake during Guided Setup, simply press LEFT arrow to go back and fix it. You can also change your setup information later in Messages & Setup. (See Chapter 5 for details.)

- **Guided Setup is intelligent.** In Guided Setup, you tell your Recorder about your program source (antenna, cable, or satellite) and equipment setup. That way, you only have to complete the steps that apply to your particular setup.
- **Guided Setup requires two phone calls.** Try to complete Guided Setup when you don't need to use the phone line for an hour or so.

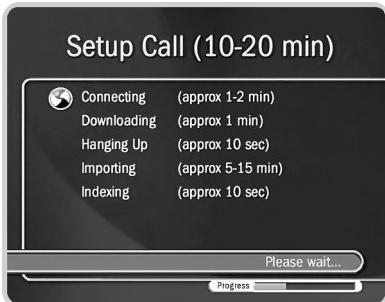
After completing Guided Setup, you can watch live TV, play and record DVDs, and use TiVo Basic service features to control live TV. You will have to wait a few hours while the Recorder organizes program information before you can schedule recordings.

In addition, your Recorder needs to connect periodically to the TiVo service to keep your program information current—using either a phone line or a broadband connection to the Internet (after you have completed Guided Setup, see chapter 8 for more information about connecting to the TiVo service through a shared broadband connection).



 If you can't find the help you need in this chapter, please refer to the *Installation Guide* for Customer Support contact information.

 If you need to use the phone during either of the setup phone calls, pick up your telephone, wait a moment, then hang it up and wait about forty-five seconds. The Recorder hangs up, and the next time you pick the phone up there is a dial tone. You will need to re-initiate the Guided Setup phone calls later.



► Tips and Troubleshooting

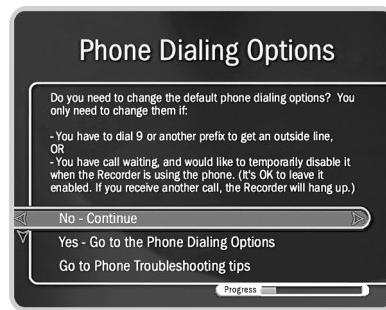
E-Mail Address. When you provide your e-mail address, you will be notified about what's new at TiVo, including new features and TiVo exclusives. Plus we'll give you tips and hints on how you can get even more from your TiVo service. (Your e-mail address is kept strictly confidential and will not be sold, rented, loaned, or otherwise disclosed. For more information on how we safeguard your privacy, visit www.tivo.com/privacy.)

ZIP Code. Antenna users: The TiVo service uses the channel lineup of a nearby cable service to determine which channels you receive. If there is no cable company that serves your ZIP code, enter the ZIP code of a nearby community that has cable service.

Phone Dialing Options. If your phone system requires special dialing options, select "Yes." (For example, do you dial "9" to get an outside line?) Most people won't need to change the settings. If you're not sure, or if you need help with specific dialing options, see page 61 for information about each option.

Setup Call. This toll-free call takes a few minutes to retrieve the dial-in numbers for your area code and the list of cable or satellite providers for your ZIP code. After hanging up, the Recorder takes five to fifteen minutes to organize the information. If the call doesn't succeed, see page 119 for troubleshooting steps.

Dial-In Number. The Recorder uses the dial-in number you choose for its periodic connections to the TiVo service. The list may be too long to fit on one screen. To see more phone numbers, press the DOWN arrow or CHAN DOWN.



TiVo uses either a phone line or a broadband Internet connection to provide the TiVo service and is available as a local call in most areas. In some areas, however, local and long distance toll charges may apply. You are responsible for any telephone charges.

Satellite Provider. If you subscribe to additional local channels for your city or a nearby city from your satellite provider, choose the appropriate option followed by the city name from which you get your local channels (e.g., DIRECTV-Sacramento).

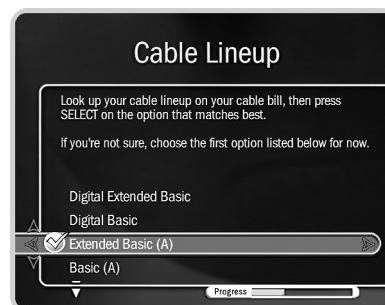
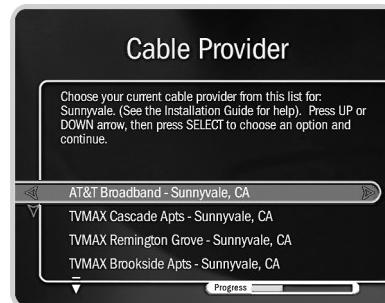
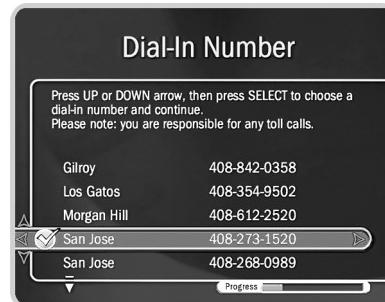


Cable Provider. Cable companies may have entries with very similar names, and it may be difficult to know which is yours. Check your channel lineup card (received during cable installation) or your cable bill. If you aren't sure, make your best guess. Later in Guided Setup, you can check your guess on the Channels You Receive screen (see page 6). If you still don't see your provider, go back and verify that you entered the correct ZIP code.

Cable Lineup. A lineup is the type of subscription you purchased from your cable company. Lineups usually have names like "Basic" or "Extended Basic." Your cable bill may have this information. If you still aren't sure, make your best guess. Later in Guided Setup, you can check your guess on the Channels You Receive screen (see page 6).

You may also see names like "Rebuild Basic" or "Rebuild Extended Basic." "Rebuild" is a term TiVo uses to refer to a revised lineup. Usually you would be informed by your cable company if your lineup has been revised. If your best guess at a lineup choice was not correct, and a rebuild lineup with a similar name is available, try that one instead.

If you have a cable A/B system, you must pick either A or B to watch with your Recorder.





 You can page through the list with CHAN UP/DOWN. To go directly to a specific channel, press the number buttons, then press ENTER.

Channels You Receive. First, if you had to make a guess about your provider or lineup, verify that the channel numbers match the networks on this list. (For example, if you had the lineup illustrated on the left, is channel 2 actually KTVU?) If you aren't sure, refer to the channel guide or quick-reference card from your cable or satellite company.

Next, add or remove checkmarks—so that the list reflects the channels you actually subscribe to—by highlighting a channel and pressing SELECT. (Some types of satellite boxes will get stuck on channels you don't receive if they are selected here, so be sure to de-select the channels you don't receive.)

You can also customize this channel list to reflect your viewing preferences. If you never watch a particular channel, and don't plan to set up recordings or let TiVo search for programs on it, remove the checkmark next to that channel.

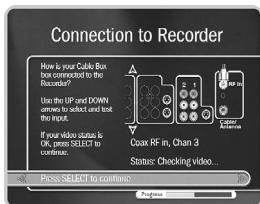
The TiVo service only searches for programs on channels that have a checkmark. Also, the CHAN UP/DOWN button skips channels that don't have a checkmark in this list.

Finally, highlight “Done selecting channels” and press SELECT to continue. If you change your mind, you can easily make changes after you finish Guided Setup. (See page 51.)

Channel Changing. If you use a cable or satellite box, your Recorder needs to send it a signal in order to change channels. The Recorder does this through an IR (infrared) or serial connection. Make sure that the connection described on this screen matches what you have used to connect your cable or satellite box to your Recorder. For help choosing and setting up a connection, see the *Start Here* booklet and the *Installation Guide*. After Guided Setup, if your channels don't change, see troubleshooting steps on page 122.

Connection to Recorder. These screens ask what type of video cable you used to connect your cable or satellite box to your Recorder. Choose your configuration from the three choices described on page 7. (**Hint:** the first one is the most common.)

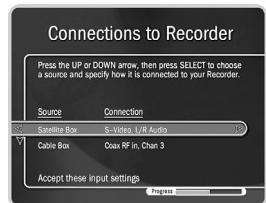
**① Satellite only,
or cable with a box only:**



* Use the UP/DOWN arrows until the picture of the Recorder matches the cable connection you used to connect your satellite or cable box. When the video status below the picture says "Video OK," press SELECT to continue. If the video status says "No Video," double-check that the video cable is firmly connected to the Recorder and that you have selected the correct type of video cable.

**② Satellite & antenna,
or satellite & cable
without a box**:**

 ** Setups with two program sources like these are only available after you upgrade to TiVo Plus. For more information, visit www.tivo.com/upgrade.



1. Use the UP/DOWN arrows to highlight "Satellite Box" and press SELECT.

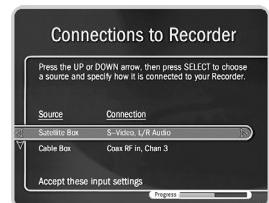


2. Follow the directions at the top of this page (marked with *).



3. Use the DOWN arrow to highlight "Accept these input settings" and press SELECT.

③ Satellite & cable with a box:**



1. Highlight "Satellite Box" and press SELECT.



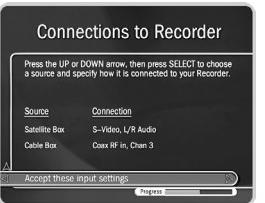
2. Follow the directions at the top of this page (marked with *).



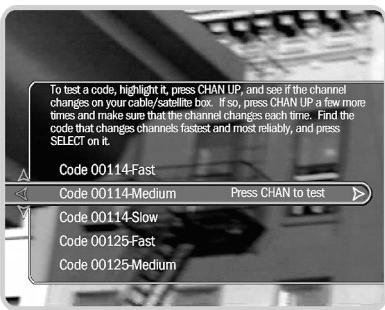
3. Highlight "Cable Box" and press SELECT.



4. Follow the directions at the top of this page (marked with *).



5. Highlight "Accept these input settings" and press SELECT.



IR Code List. If you use an IR connection, the Recorder must send a code to your cable or satellite box in order to change channels. You will need to test these codes to see which works best with your connection. Each code has a slow, medium, and fast version. First, test the slow codes by highlighting them and pressing the CHAN UP/DOWN button slowly several times. When you find a slow code that changes channels every time, try a faster speed for that code. (Slow may take longer, but fast may be too fast for your cable or satellite box.) You want to find the code with the fastest speed that changes the channel every time. When you find it, press SELECT to choose that code. If channels don't change at all for any of the codes in the list, see page 122 for troubleshooting steps.



Program Call. During this call, the TiVo service downloads all your program information—which includes program titles, times, channels, and descriptions—for up to the next three days (or up to two weeks with TiVo Plus service). If the call doesn't succeed, see page 119 for troubleshooting steps. If you need to use the phone, pick up your telephone, wait a moment, then hang it up and wait about forty-five seconds. The Recorder hangs up. You will need to re-initiate the program call later.

Congratulations! Once you have completed Guided Setup, you'll see the Congratulations! screen.

You can immediately begin watching live TV and using your Recorder's features to control live TV (pause, instant replay, slow motion). The Recorder works behind the scenes for about four to eight hours to organize program information for the first time. During this process, you will have to wait to view program guide data in the TiVo Live Guide.

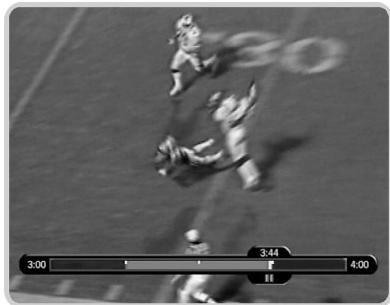
Press the TiVo button on your remote control to go to TiVo Central® to begin enjoying the TiVo Basic service. For help getting started, check out the tours in Chapter 2 of this guide.



CHAPTER 2

The Basics in 5 Short Tours

Tour One: Play with Live TV	10
Tour Two: Find and Record Programs	12
Tour Three: Now Playing and Copy to DVD	14
Tour Four: Playing a DVD or CD	16
Tour Five: Finding New Programs	18
Cool Things You Can Do	19



 **Changing channels works just like you would expect it to: use the number buttons on the remote control to enter a channel number, then press ENTER; or press the CHAN UP or CHAN DOWN buttons to surf one channel at a time.**

 **You can use your Recorder's remote to control the power, volume, mute, and TV input settings on your TV. For information on setting this up, see the Installation Guide that came with your Recorder.**

► Tour One: Play with Live TV

In this tour, you'll learn how to control live TV. So turn on your TV and grab your remote! (When you want to watch live TV, just press the LIVE TV button.)

|| First, press the PAUSE button—the program you're watching pauses. Now you can stand up and stretch, or go to the kitchen and get a snack. You can pause live TV for up to 30 minutes! Press the PAUSE (**||**) button again and the program resumes.

► But for now, press PLAY and the program resumes.

<< Next, press BACK—the program rewinds. Press the BACK (**<<**) button a second time—it goes faster! A third time—faster still! Both the FWD (**>>**) and BACK (**<<**) buttons have three speeds. Press them a fourth time (or press PLAY (**>**) at any time) to return to normal speed.

|| + > Press PAUSE once more, then immediately press FWD—frame-by-frame forward! Press BACK—frame-by-frame rewind. When your show is paused, FWD and BACK let you go frame by frame. Press PLAY (**>**) to resume watching at normal speed.

↻ Try out the INSTANT REPLAY button. INSTANT REPLAY jumps you back eight seconds—useful for when you miss a great sports play or a bit of dialog. If you fast forward too far, press INSTANT REPLAY once or twice to go back and hit your mark.

↻ + > Press INSTANT REPLAY again, then immediately press SLOW. You get your own slow-motion replay!

→|| Finally, try the ADVANCE button. Presto! You're caught up to live TV. Pressing the ADVANCE button again takes you back to the beginning of the program. In addition, pressing the ADVANCE button from within a list (for example, the Now Playing list) jumps you to the top or bottom of the list.

► Status Bar

Press the PAUSE (**II**) button to make the status bar visible. It shows a one-hour period. The green segment is the portion of the hour that has been saved by your Recorder.

Look for the white line. It marks the part of the program you are currently watching. If the white line is anywhere back in the green segment, you are “behind” real time (which is way better than being behind the times!). Press the ADVANCE button (**→II**) to catch up to real time.

Now press CHAN UP. When you change channels, the saved programming from the old channel is cleared, and the Recorder starts to save what is showing on the new channel.

► Channel Banner

You see the channel banner when you change the channel or press INFO or RIGHT arrow. It’s only there for a few seconds, but you can bring it back by pressing INFO (or RIGHT arrow) again. While the banner is visible, press RIGHT arrow to switch from a small to medium to large banner. Note that each version has a different amount of information.

Keep pressing RIGHT arrow until you see the largest version of the channel banner. Notice the small icons on the right side. Each symbol represents a useful feature, such as recording or Parental Controls. Press the UP and DOWN arrows to highlight different icons. Pressing SELECT while an icon is highlighted takes you to that feature. (For more on using these icons, see page 29.)

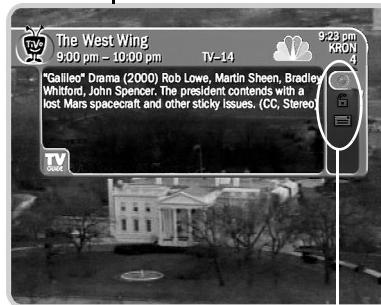
Finally, press the CLEAR button—the channel banner disappears. (CLEAR hides anything on the screen that isn’t part of the program you’re watching.)

Now go have fun playing with live TV, then come back for the next tour!



status bar
This white line
tells you where
you are.

channel banner



selectable
icons

►► Tour Two: Find and Record Programs



The left side shows a list of all programs during this time period.

The right side shows a list of what's coming up on the channel you have highlighted.

Be sure your Recorder is connected to a phone line or a home network with a shared Internet connection. This keeps it connected to the TiVo service so you always have up-to-date program information.

Recording from Live TV. The quickest way to record a program, is to just press the RECORD button while you are watching live TV. After the confirmation screen, the program begins recording, including however much of it has already been saved.

► The TiVo Live Guide

Your Recorder's program guide, called the TiVo Live Guide, lets you see what's on up to three days in advance, change channels, schedule recordings, and more—all while you're watching live TV. Press the GUIDE button to see the TiVo Live Guide.

On the left side of the guide is a list of channels and current programs. A blue highlight shows you where you are in the guide. A description of the highlighted program appears at the top of the guide. To the right is a list of upcoming programs on the current channel.

Choosing a Program. See something you'd like to watch? Press the UP and DOWN arrows to move the highlight to a new channel. (Notice that the description at the top and the list on the right change.) Then press SELECT—the channel changes and the guide disappears. Press GUIDE again to bring the guide back.

Looking Ahead. While the highlight is on the left side of the guide, press the FWD (►►) button to see thirty minutes ahead. Press BACK (◀◀) to see thirty minutes back. It's a quick and easy way to scan upcoming programs on a lot of channels at once.

Press RIGHT arrow to move the highlight to the right side of the guide, then press DOWN arrow a few times. UP and DOWN arrow move through the list of upcoming programs on the current channel. CHAN UP and CHAN DOWN jump quickly through the list.

Recording a Program. You can schedule a recording of any program you see in the guide by highlighting it and pressing RECORD. Yes, it's just that easy!

► Creating a Manual Recording

With TiVo Basic, you can schedule a recording for a fixed time every week. This tour shows you how to schedule a recording for Mondays from 8:30 to 9:00 PM.

First, press the TiVo button to go to TiVo Central. (This is the starting point for many of the Recorder's features.) Press DOWN arrow to highlight Pick Programs to Record, then press SELECT. On the next screen, select Manually Record by Time/Channel.

To set the recording type, day, and channel, start by pressing DOWN arrow to highlight "Repeating," then press RIGHT arrow. Press DOWN arrow until "Every Mon" (for "Monday") is selected, then press RIGHT arrow again. Use the UP and DOWN arrows to select any channel (for this example, it doesn't matter which). Press RIGHT arrow again.

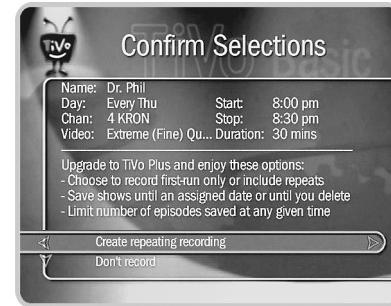
Start and Stop time each have three parts: hour, minute, and AM or PM. At "Start time," press the UP or DOWN arrow to change the hour to 8, then press RIGHT to go to minutes. Use the UP/DOWN arrows again to set minutes to 30. Finally, use them to set AM/PM to PM. The "Stop time" is already a half-hour later, so press SELECT to see a confirmation.

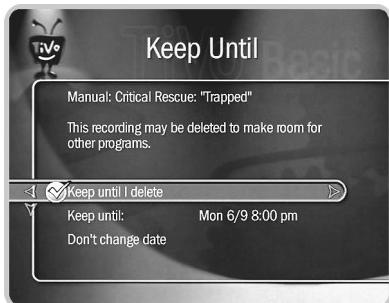
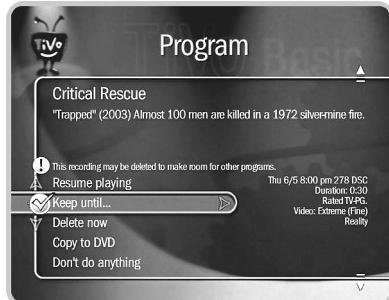
The confirmation screen shows the recording you requested. If the Recorder has program information for the time you want to record, it uses a program name to label the recording. Since this is just an example, you can choose "Don't record."

That's it! You've learned how to schedule recordings from live TV, from the TiVo Live Guide, and by creating a manual recording. Now wouldn't it be useful to know how to watch those recordings? That, and more, is explained in the very next tour.

Get More with TiVo Plus!

With TiVo Plus you can search for a program by title, actor, director or keyword, and then create a Season Pass to automatically record it even if it changes times! Check out the free trial on TiVo Central now.





► Tour Three: Now Playing and Copy* To DVD

The last tour showed you how to find and record programs. After a program has started recording, it appears in Now Playing—a list of all the programs stored on your Recorder. To go to Now Playing, just press the TiVo button twice. Even if you haven't recorded anything, your new Recorder may have come with some entertaining short programs.

 An icon like this next to a recording in Now Playing tells you the recording's current status (see the inside back cover for a glossary of these icons). Programs appear in Now Playing the moment they begin recording, and you can watch any title in Now Playing—even one still being recorded. Just highlight it and press the PLAY (►) button. Try it now. Highlight a program and press PLAY (►). (If there are no programs in Now Playing, go to live TV and start a recording so you can complete this tour.)

Now for the cool part—watch the program for at least 5 minutes (or just fast forward through some of it), then press LEFT arrow button to go back to Now Playing. This time, press SELECT on the program title. On the Program Information screen that appears, select “Resume Playing.” The program starts from where you left it!

Keep until... By default, the oldest programs you record may be deleted to make room for new recordings you've scheduled (they are usually kept at least two days). However, you always have the option to keep a program for as long as you want.

To change how long a program in Now Playing is saved, highlight it and press SELECT or RIGHT arrow. The Program Information screen appears. Select “Keep until....” On the next screen you can choose “Keep until I delete” or use the arrow buttons to highlight and change the date displayed. When you are done, press SELECT.

► **Copying* a Program From Now Playing to a DVD**

Your Pioneer DVD Recorder with TiVo not only records to Now Playing, it can also copy programs from Now Playing to a recordable DVD. The rest of this tour shows you how. If you don't want to use a disc for the programs currently in Now Playing, you can still go through the tour, and just cancel before creating the disc.

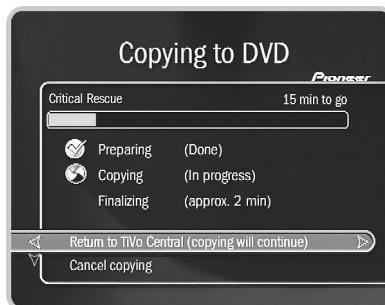
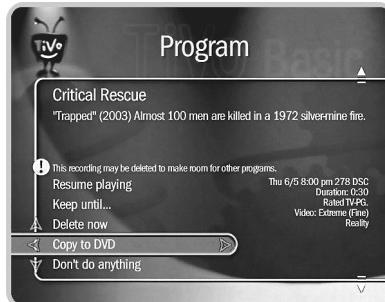
Put In a Disc. First, you have to put a disc into the Recorder's disc tray. You can use either a "DVD-RW" disc, which can be copied to, erased, and copied to again, or a "DVD-R" disc, which can only be copied to once. You must use a "DVD" disc. The Recorder will not copy to some DVD formats (such as those with a "+" sign), so make sure your blank disc is either DVD-RW or DVD-R. To insert a disc, press the OPEN/CLOSE button (▲) on the front of your Recorder, put in the disc with the blank, shiny side down, and then press OPEN/CLOSE (▲) again.

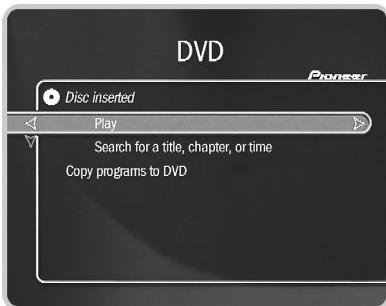
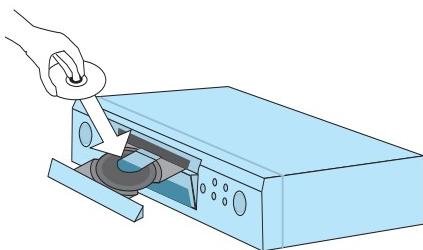
Select a Program. Go to Now Playing (if you are not there already, press the TiVo button twice), and highlight a program. Press SELECT to see the Program Information screen, then select "Copy to DVD." The next screen asks whether you want to copy just the program you selected, or additional programs as well. For this tour, select "Copy just this program." The following screen suggests a name for the disc, and asks if you want to use it or enter your own. For this tour, just select "Yes" to use the suggested name.

Make the Copy*. At this point, you see the Confirmation screen, this is your last chance to cancel the copy, so if you do not want to copy to the disc you have inserted, select "Don't copy," otherwise select "Begin copying to DVD."

As you can see, there are more options than are covered here, but those are the basics. The next screen tells you how long it will take to copy your program. When the copying is done, you have a new DVD with your program on it! For a further details, see page 42.

* Some content may not be copied due to copy protection rights over the material. For more details, see "Copy Protected Material" on page 35.
DVD recordings that you make using this Recorder are for your personal use only; see page 35. You may not sell, lend, or rent them to other people.





► Tour Four: Playing a DVD or CD

You must complete Guided Setup before you can play CDs, and play or record DVDs. For instructions, see “Completing Guided Setup” on page 3.

Playing a DVD or CD in the Recorder does not interfere with recording TV. However, you cannot watch a recording or live TV while playing a DVD or CD.

Playing a Disc

To put a disc into the Recorder, press the OPEN/CLOSE (▲) button on the front panel of your Recorder to open the disc tray. Put in the disc with the label side facing up, using the disc tray guide to align it, then press OPEN/CLOSE again to close the disc tray. (For a full list of the different kinds of discs that are compatible with the Recorder, see page 32.)

DVD Menu. After you have inserted a disc, TiVo Central changes to show that the Recorder is holding a disc. Highlight the DVD item on TiVo Central and press play to start the disc from the beginning. However, the DVD menu usually gives you more playback options.

To go to the DVD menu, press the DVD button on the Recorder’s remote control. Pressing the DVD button from most screens, from live TV, or while you are playing a DVD, goes directly to the DVD menu.

From the DVD menu, select Play to start the currently loaded disc. Go ahead and try it. (If you have a DVD disc in the tray and see a menu after you select Play, choose the option you want to view to start the video playing.)

Controlling Playback. While a disc is playing, you can press the PAUSE (**II**) button, to pause the music or video, just as you would with live TV or with a program from Now Playing. Press PLAY (**>**) to restart the program. PAUSE, PLAY, FWD (**>>**) and BACK (**<<**), all work with DVDs and CDs. In fact, while playing a DVD, all of the control buttons work as they would for live TV or a program in Now Playing. (See Tour One for details.)

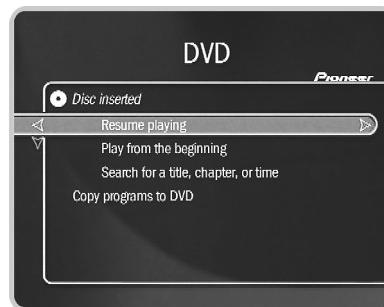
Finally, while a disc is playing, the CHAN/PAGE button has SKIP FWD (**>>I**) and SKIP BACK (**I<<**) functionality. Press SKIP FWD (**>>I**) to go to the beginning of the next chapter on a DVD or the next track on a CD. Press SKIP BACK (**I<<**) once to go to the beginning of the current chapter or track; press it again to go to beginning of the previous chapter or track.

Stopping and Resuming. Press the STOP (**■**) button. The disc stops playing and the Recorder goes back to the DVD menu.

Notice the DVD menu now has an option to “Resume playing.” If you want, you can go to Now Playing or live TV and watch something else. Then when you’re ready, you can press the DVD button to return to this menu and select “Resume playing.” Playback of the disc picks up right where you left off.

Removing the Disc. To remove the disc, just press the OPEN/CLOSE button (**▲**) on the front panel of the Recorder once to open the tray. Remove the disc then press OPEN/CLOSE again to close the empty tray.

The Recorder can record to DVD-R and DVD-RW discs. It can playback most DVD-R and DVD-RW discs that contain video. It can also playback audio CDs and most CD-R and CD-RW discs that contain MP3 files. Playback control (such as FWD, REWIND and INSTANT REPLAY) is not available for MP3 files larger than 10 megabytes that were recorded with VBR (variable bit rate). For more information, see “Compatibility and Copy Protected Material” on page 32.





If you have just finished Guided Setup and you go to Pick Programs to Record, you will see a message at the bottom of the screen stating that the Recorder is still indexing data. The Recorder should be done indexing within 4 to 8 hours of finishing Guided Setup.

► Tour Five: Finding New Programs

So far, you have seen ways to find, record, and copy programs you already know you like. With Showcases, the TiVo service helps you find the best programs you may not have heard of and often includes additional, exclusive content as well.

► Showcases

Showcases is an interactive content area which often includes opportunities to schedule recordings of featured programs or allows you to watch previews of upcoming movies or TV shows. The programs in Showcases are grouped in theme packages, giving you “one-stop shopping” convenience when browsing for programs to record. Packages may include exclusive content, the inside scoop on hit movies, exciting miniseries, hot specials, popular series, and shows featuring the biggest stars of the screen and stage. Showcases is updated during your Recorder’s regular connection to the TiVo service.

► TiVoolution Magazine

TiVoolution Magazine is one part of Showcases where you’ll always find something fun and different. It’s a guide to the best upcoming shows on television. You’ll find premieres, specials, and offbeat gems, making it easy for you to schedule recordings. New content is delivered fresh to your Recorder during regular connections to the TiVo service.

Use the arrow buttons and the SELECT button to explore the TiVoolution Magazine. Once you get to a list of programs, select a title to see the Program Information screen. If you receive the channel the program airs on, you can set up a recording—it’s that easy!

► Cool Things You Can Do

Never be late for your favorite programs. Working late? Stuck in traffic? Don't worry! If you've set up a recording, the program will be waiting for you in Now Playing. You can even start watching from the beginning while the program is being recorded.

See a good preview, record the show. While you're watching live TV you may see an Ipreview® icon like this:  during a promotion for an upcoming program. Press THUMBS UP when you see the icon to automatically set up a recording for the program. You don't have to remember when it's on—it will be recorded! (And you can even rewind to see an icon you may have missed, and then press THUMBS UP.)

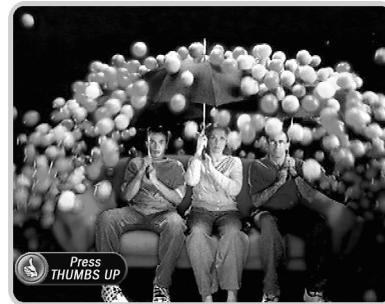
Use the CLEAR button. The CLEAR button hides the status bar, TiVo Live Guide, channel banner, and anything else that is not part of the program. It clears the text entered using the letter grid. And if you highlight a program's title in a list, pressing CLEAR deletes the program.

★ Upgrade to TiVo Plus

Things get even cooler when you upgrade to TiVo Plus. Here's just some of what you get:

- Search by Title—makes it incredibly easy to find programs you want to record.
- Season Pass—record every episode of a series, even if its schedule changes.
- WishList—search, find, and record by category, actor, director, or keyword.
- Overtime Scheduler™—easily adjust recording times and never miss overtime.
- TiVo Suggestions—a personalized list of suggestions that match your preferences.
- More program information—up to two weeks—four times more than TiVo Basic.

TiVo Plus gives you more control! For the full scoop, see page 71.



CHAPTER 3

Playing and Recording Programs

TiVo Central	22
Recording Programs	23
To Do List	28
Watching Programs in Now Playing	29



►► TiVo Central

Almost everything you do with the TiVo service will start in TiVo Central; you can set up recordings, watch programs, read messages from the TiVo service, and access special Showcases featuring entertaining and informative video. To get to TiVo Central, press the TiVo button on your remote control.

Occasionally, you will notice special icons beside some of the options in TiVo Central. These icons let you know that you have received something new from the TiVo service:

-  When you see this icon, you know you have new messages to read.
-  This icon appears next to selections that contain special video content.
-  Choose the selection next to this icon to watch a special preview or visit a Showcase.
-  Choose the selection next to this icon to check out special offers or information from TiVo.
-  The silver disc icon appears if a playable DVD is inserted.
-  (*Orange with black border*) This icon appears if a copy to DVD is in progress. All DVD functions (such as playing a disc, copying to another DVD) are unavailable.
-  This icon appears if a playable CD is inserted.

From TiVo Central, you can go to Now Playing to watch recorded (or recording!) programs and watch DVDs. You can also go to Pick Programs to Record to schedule recordings.

► Recording Programs

This section describes the many different ways you can record a program. As soon as a program starts recording, it appears in Now Playing (described on page 29).

► Recording From Live TV

You can always record the program you're watching by pressing the RECORD button on your remote control.

Starting a Recording. To start recording a program while you are watching it, press the RECORD button. On the transparent screen that appears, select “Record this showing at Extreme (Fine).” As soon as the recording starts, the program will appear in Now Playing. Select “Change recording time” to modify the recording.

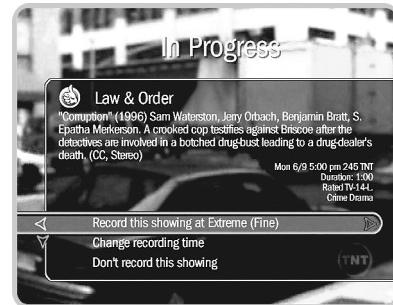
You can also record any program—even one in progress—by highlighting it in the TiVo Live Guide, then pressing RECORD.

Recording the Saved Portion. Up to 30 minutes of programming from the current channel is always being saved, even when you are not recording a program. When you change channels, the Recorder clears what it has saved and starts saving programming again on the new channel. (So, if the saved portion is important to you, record it or don’t change channels.)

To record the saved portion—in addition to the rest of the program—you must select “Record this showing at Extreme (Fine).”

Stopping a Recording. Two ways to stop a recording are:

- Select the title in Now Playing, then select “Stop Recording,” or
- Press the RECORD button in live TV, then select “Stop the current recording.”



3





Here's a tip: Use a short Manual Repeating Recording to record things like the first fifteen minutes of a late night talk show so you can always catch the opening monologue.

► **Manually Record by Time/Channel**

With TiVo Basic service, you can schedule a manual recording on a specific channel at a specific time (just as you would with a VCR). You can also create a manual repeating recording here by setting the recording to repeat every week, every day, or every weekday.

To create a manual recording:

1. Go to TiVo Central, then select Pick Programs to Record, then Manually Record by Time/Channel.
2. Choose the recording type, using the UP and DOWN arrows to select “One Time” or “Repeating.” Then press RIGHT arrow.
3. Choose the day(s) for the recording, using the UP and DOWN arrows to change the current selection. If you chose “Repeating,” you can choose to repeat the recording on a specified day of the week (for example, “Every Tuesday”) or several times a week (for example, “Every M - F” or “Every Day”). Then press RIGHT arrow.
4. Choose a channel using the UP and DOWN arrows (or by entering a number with the remote, then pressing ENTER). Press RIGHT arrow.
5. Set the hour, minute, and am/pm for the start and stop time, using the UP/DOWN arrows to change the current selection. Press RIGHT arrow to move to the next step, LEFT arrow to move back. If you think your program might start early or end late, adjust the start and stop times appropriately.
6. Schedule the recording by pressing SELECT. A confirmation screen appears. (The recording is named based on program guide listing for that time and channel. This will help you find your program later in the To Do List or in Now Playing.) When you’re ready to schedule the recording, just press SELECT.

► Record using the VCR Plus+ System

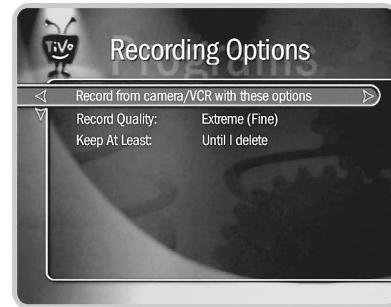
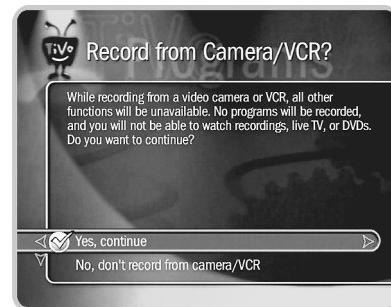
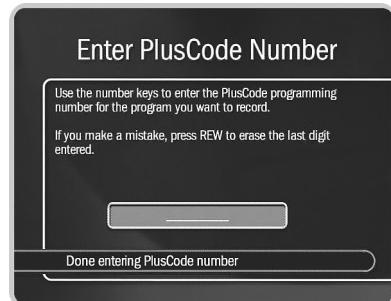
After mapping the VCR Plus+ Guide channels (usually available in your local newspaper's TV listings) to channels in your channel lineup, you can enter the PlusCode programming number to record a program. (See page 51.)

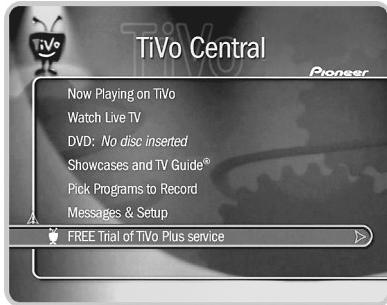
► Record from a Video Camera or VCR

You can record content from a video camera or VCR (video tapes) to your Recorder. While recording from a video camera or VCR, all other functions are unavailable. No programs will be recorded from TV, and you will not be able to watch recordings, live TV, or DVDs. If recording from video camera or VCR causes disk space conflicts or upcoming scheduled program recording conflicts, you will be notified and given the option to continue or cancel.

To record from your video camera or VCR:

1. Go to TiVo Central, then select Pick Programs to Record, then “Record from a Video Camera or VCR,” then select “Yes, continue.”
2. Connect the video camera or VCR to input line 2 on the back of the Recorder using composite cables. (For more information about connecting a video camera or VCR to your Recorder, see the *Installation Guide*.) Turn on the video camera or VCR and select “Done connecting and turning on camera/VCR” to continue.
3. On the Name Recording screen, enter the name of your recording by using the arrow keys on your remote control to highlight a character, then press SELECT. Use THUMBS UP and THUMBS DOWN to change to uppercase or lowercase. Select “Done entering name” when you are finished.





4. Specify the length of the recording, which recording quality you want to use, and how long to keep the recording. **Hint:** Make sure to add extra time to queue up the video camera/VCR because the recording *will* stop at the time indicated on the screen.
5. When the recording is complete, it is listed in Now Playing (see page 29). Before erasing the original camera/VCR tape, check the completed recording to make sure it contains all of the video you wanted.

► **FREE Trial of TiVo Plus**

For a limited time, you can try TiVo Plus service simply by accepting our **free trial** once you get your Recorder set up. Use your free trial to explore the advanced features of TiVo Plus (Season Pass recordings, WishList searches, Search by Title, and much more!). You won't be asked for a credit card, or charged a penny until you upgrade to TiVo Plus service via the TiVo web site (www.tivo.com/upgrade) or by calling TiVo directly at 1-877-367-8486.

Once you start your free trial, you'll be able to use the additional TiVo Plus options (marked by an asterisk) on TiVo Central, Pick Programs to Record, and Record by Time or Channel.

When your free trial of TiVo Plus expires, the TiVo Plus features will go away unless you decide to upgrade.

★ **Upgrade to TiVo Plus**

Once you upgrade to TiVo Plus, you'll be able to:

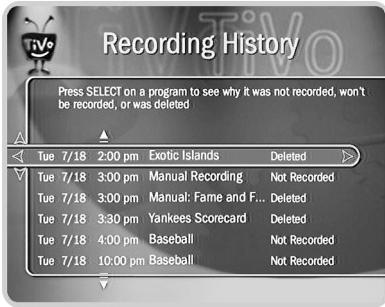
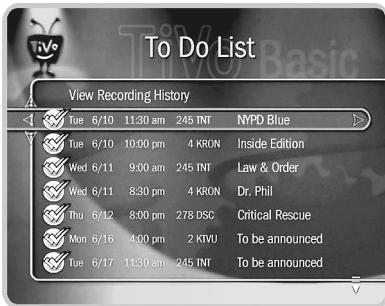
- **Browse by Time.** Browse by Time lets you browse all programs on a particular day and time. (For more information, see page 82.)
- **Browse by Channel.** Browse by Channel lets you browse through programs on a particular channel. (For more information, see page 83.)

- Search by Title.** Search by Title finds programs, even if you just know the first part of the title. You can also browse all the upcoming programs in a particular category and find shows you didn't know were on.
- Get a Season Pass.** A Season Pass automatically records every episode of a series that airs on a certain channel—even if the date or time slot changes!
- Season Pass Manager.** If two programs are set to air at the same time, the Season Pass Manager checks the priorities to decide which program to record.
- Recording Options.** Recording Options allow you to change the recording quality, set the maximum number of episodes to be saved, select whether you want to record all episodes (with repeats) or just first runs, and set the minimum amount of time the Recorder keeps a recording. You can also adjust recording time with the Overtime Scheduler, allowing a recording to begin (up to ten minutes early) or continue (for a few minutes or up to three hours) after it's scheduled to end. (This is perfect for recording sporting events.)
- Search Using a WishList.** Have a favorite actor? A favorite hobby or interest? How about a favorite sports team? WishList searches are a powerful feature that finds upcoming programs based on actor, director, or even keyword, and then automatically records them, if you want.
- TiVo Suggestions.** The TiVo service tries to make sure there is always something interesting on for you to watch. When you aren't using it, your Recorder is sifting through upcoming programs to find things you might like. TiVo Suggestions is a personalized list of shows selected to match your preferences.



3





► To Do List

The To Do List shows all your scheduled recordings and lets you cancel or edit them. Individual recordings are marked with a single checkmark (). Manual repeating recordings have a double checkmark (). You can turn an individual recording into a repeating recording by selecting “Repeat this recording” from the Program Information screen of any scheduled recording on your To Do List.

To cancel a program or a repeating recording: Highlight the title and press CLEAR.

► View Recording History

This is an advanced feature in the To Do List for those who really want all the details. Selecting this option takes you to a list of three types of programs:

Deleted. To find programs that were deleted, press the UP arrow or CHAN UP. (You will find these programs listed above the point where the highlight bar starts off.) Selecting a title will take you to a screen that tells you how and when the program was deleted.

Not Recorded. To find programs that were not recorded, press the UP arrow or CHAN UP. (You will find these programs listed above the point where the highlight bar starts off.) Selecting a title will take you to a screen that tells why it was not recorded.

Won’t Record. To find programs that will not be recorded, press DOWN arrow or CHAN DOWN. (These programs are listed below where the highlight bar starts off.) Selecting a title will take you to a screen that tells you why the program will not be recorded.

★ Upgrade to TiVo Plus

If you upgrade to TiVo Plus, you’ll have access to Recording Options, which allow you to

View Upcoming Episodes. When a conflict occurs, use this feature to find an episode that doesn’t conflict with your other scheduled recordings. (For details, see page 78.)

► Watching Programs in Now Playing

To go to Now Playing, press the TiVo button on your remote control twice, or select Now Playing from TiVo Central. All programs stored on your Recorder are in Now Playing (no more searching through unlabeled videotapes!). As soon as a recording begins, it appears at the top of the list. You can watch any title in Now Playing, even one still recording.

To watch a program in Now Playing, highlight it and press PLAY (►). If you have watched part of the program already, it resumes from the point you stopped watching.

To see more actions you can take, highlight a title, then press SELECT or RIGHT arrow. A Program Information screen appears and lets you select from the actions below:

- **Play or Resume playing**
- **Keep until...** To change the date when the program may be deleted, highlight the date, then press RIGHT or LEFT arrow until the date you want appears. Press SELECT to return to the Program Information screen.
- **Stop recording or Delete Now** If the recording is in progress/has finished recording.

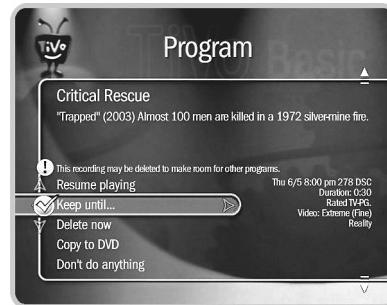
► The Channel Banner

In Tour One, you learned about the channel banner. It is also available when you are watching a program in Now Playing. Press INFO or RIGHT arrow to see it. It only stays a few seconds, but you can always hide it by pressing CLEAR or LEFT arrow. Just as in live TV, you can press RIGHT arrow to switch among the channel banner's three sizes (small, medium, and large).

Selectable Icons. The large channel banner has different selectable icons. Each icon controls a different feature. To use an icon, use the UP/DOWN arrows to highlight it, then



3

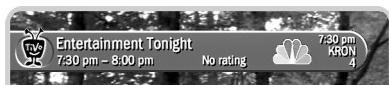


 **As recordings appear in Now Playing, a colored icon to the left of each title reflects how long each program will be saved and whether or not it was recorded automatically. See the inside back cover for a glossary of these icons.**

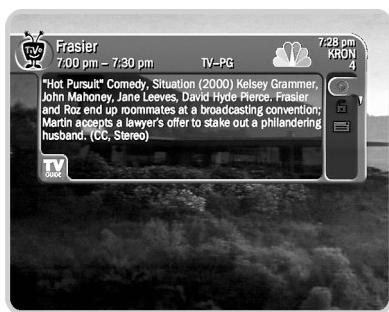
 **Pressing RIGHT arrow switches among channel banner styles, from small...**



...to medium



...to large



 **If you are watching TV and want to check the time, press RIGHT arrow to see the Channel Banner. If you are only interested in the time, set the Channel Banner to its smallest size.**

press SELECT. The icons available in the channel banner when you are watching a program in Now Playing are the same as those available in live TV:



Record. Select to record a program (or stop a current recording). If a recording is in progress, the icon appears bright.



Parental Controls. Select to go to Parental Controls (page 53). If Parental Controls are off, the lock is unlocked and dim. If they are on, it is locked and bright (pictured here). If they are off temporarily, it appears unlocked and bright.



Messages. Select to read new messages.



Progressive Output. Appears if the Progressive Output video setting is set to "Progressive." Select to change the setting. (See page 65.)

► The Status Bar

When you press a control button (such as PAUSE, BACK or INSTANT REPLAY) the status bar appears. It shows the length of the program you are watching. The tick marks are 15, 30, or 60 minutes apart, depending on the program.

Status Bar for a two-hour recorded program.

White line indicates where you are now.

Tick marks (15 min. apart)



The symbol at the bottom of the status bar shows you which control buttons have been pressed. In this example, BACK has been pressed twice.

► Control Buttons

You can use control buttons (such as PAUSE, BACK and INSTANT REPLAY) while you watch a program in Now Playing just as you would while watching a DVD. (See page 39.)

CHAPTER 4

Playing DVDs and CDs

Compatibility and Copy Protected Material	32
Playing a DVD or CD	36
Recording a DVD	42
Disc Care	45

 Some discs recorded using a DVD recorder, CD recorder or personal computer may not be playable in this recorder even though they were made with software that is compatible with the Recorder. There are a number of possible reasons for this:

- the type of disc used
- damage, dirt or condensation on either the disc or in the Recorder's disc drive
- other reasons related to specific formats; see the notes about individual formats in this section

►► Compatibility and Copy Protected Material

The Pioneer DVD Recorder with TiVo can play and record standard DVDs, and play audio CDs and MP3 music CDs. This section has details about the Recorder's compatibility with different kinds of discs and files. Also included is important information about copyrighted material, and tips for taking care of discs.

► Recording: Disc Compatibility

Size. The Recorder can copy video programming to 12 cm. discs, the standard for DVDs.

Format. The Recorder can copy onto DVD-R and DVD-RW discs. (It does not record CD-R or CD-RW discs.) The packaging for these discs is marked with one of the following logos:



The Recorder is compatible with DVD-RW Ver. 1.1 and Ver. 1.1/2x, and DVD-R Ver. 2.0 and Ver. 2.0/4x.

Playback of Recorded Discs. Pioneer's DVD recorders record in *Video Mode*, which is the use of the DVD-Video format for recording on DVD-R and DVD-RW discs. DVD discs copied using this Recorder can be played back on regular DVD players, including computer DVD drives compatible with DVD-Video format. Support for playback of DVD-R and DVD-RW discs is optional for manufacturers of DVD playback equipment, and there is DVD playback equipment that does not play DVD-R or DVD-RW discs recorded in the DVD-Video format.

► **Playback: Disc Compatibility**

Size: The Recorder can playback 8 cm. and 12 cm. discs.

Format. This Recorder was designed and engineered to playback discs created by products bearing one or more of the following logos:



DVD-Video



DVD-R



DVD-RW



Audio CD



CD-R



CD-RW

4

CD-R/RW. The Recorder will play CD-R and CD-RW discs recorded in CD Audio format or recorded as CD-ROMs containing MP3 files.

DVD-R/RW. The Recorder will play DVD-R/RW discs that use DVD-Video format (Video Mode), and DVD-RW discs that use the Video Recording (VR) format.

PC-Created Discs. If you record a disc on a personal computer, even if it is in one of the compatible formats listed above, there is a small chance that settings of the software used to create the disk may prevent the Recorder from playing it. If this happens, check with the publisher of the software used to create the disc for more information. The Recorder also may not play discs with very complex directory structures (e.g., a large number of folders within other folders) or very large numbers of music playlists. While the specific number of playlists or the level of directory complexity required to make a disc unplayable depends on many factors, this should not be an issue for most PC-created discs.



This Recorder can play DVDs marked with the region code "1" or "ALL."



The "file name extension" is the last four characters of a file name. All MP3 files should end with the file name extension ".MP3", as in "ASong.MP3". Windows usually hides file name extensions; to make them visible, see the Help utility for your Windows operating system.

DVD Regions. DVDs and DVD players are manufactured for different regions of the world and are marked with corresponding "region codes." To play a DVD, the DVD and the DVD player must have compatible region codes. Discs marked with the region code ALL will play in any DVD player.

A DVD's case should be marked with a logo that indicates the region(s) in which the disc is playable. This Recorder has a region code of "1," which you can find on its back panel. Discs that do not have region code 1 or region code "ALL" will not play in this Recorder.

► **Music and Other Audio Files**

The Recorder can play music and other audio files that are in MP3 format. It will attempt to play any file with an .MP3 file name extension (upper or lowercase). Make sure the audio files on your discs are valid MP3 files and have an MP3 file name extension. A file that is not an MP3 but has an MP3 file name extension may cause noise or unexpected results when you try to play it. Other kinds of content may cause a disc not to play, or to create noise, or distort the output.

The device used to create discs with MP3 files on them must be ISO 9660 Level 1 or 2 compliant, and the CDs must be created using physical format Mode1, or Mode2 XA Form1. The Recorder is compatible with both Romeo and Joliet file systems.

Bit Rate. The Recorder is designed to playback MP3 files encoded at any bit rate. Audio encoded at 128Kbps should sound close to regular CD quality. The quality of the sound may become noticeably worse at lower bit rates.

► **Copy Protected Material**

You may only use this Recorder to reproduce or copy materials for which you own the copyright or have obtained permission to copy from the copyright owner or for which you otherwise have a legal right to reproduce or copy. Unless you own the copyright or have obtained permission from the copyright owner or otherwise have a legal right to reproduce or copy, you may be breaking the law, including copyright law, and may be subject to payment of damages and other remedies.

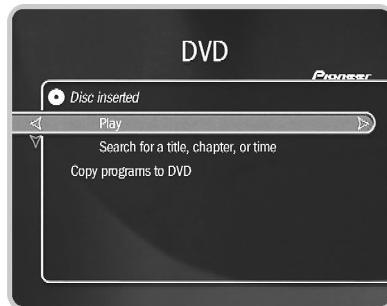
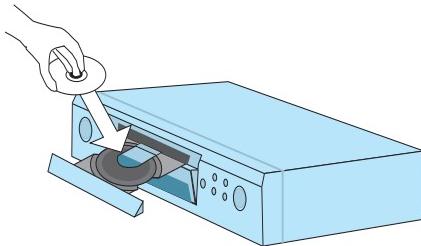
Copy protected video includes DVD-Video discs and some satellite broadcasts.

When portions of a program are copy protected, they cannot be copied to DVD. The Recorder will only copy the portions of the program that are not protected.



This Recorder can play DVDs marked with the region code “1” or “ALL.”

(For a full list of the different kinds of discs that are compatible with the Recorder, see page 32.)



▶ Playing a DVD or CD

You must complete Guided Setup before you can play CDs, and play or record DVDs. For instructions, see “Completing Guided Setup” on page 3.

If you finished “Tour Four: Playing a DVD or CD” on page 16, then you already know the basics of playing a DVD or CD on your Recorder. This section provides a bit more detail and also describes some advanced playback features.

▶ Inserting a Disc

To put a disc into the Recorder, press the OPEN/CLOSE (▲) button on the front panel of your Recorder to open the disc tray. Put in the disc with the label side facing up, using the disc tray guide to align it, then press OPEN/CLOSE again to close the disc tray. Press PLAY (▶) to start the disc.

▶ The Recorder’s DVD Screen

After you put in a disc, you can simply highlight the DVD option on TiVo Central and press play to play the disc. For more options, view the Recorder’s DVD screen. To go to the Recorder’s DVD screen, highlight the DVD option on TiVo Central and press SELECT, or press the DVD button on the remote. The DVD screen may give options such as Resume Playing, if you have already been watching the DVD, or Search Disc options.

▶ Front Panel

While playing a DVD, the Recorder’s front panel displays the title, chapter, and time elapsed in the current title. While playing MP3 files on CD, or while playing an audio CD, the front panel displays the number and elapsed time of the current track.

► **The DVD Menu Screen**

If a DVD includes a menu screen, you see the screen when you first play the DVD. To open or return to the DVD menu screen, press MENU or TOP MENU while the DVD is playing. (This may vary depending on how the DVD was created.)

To navigate a menu screen. Although individual DVD titles may differ, when a menu screen is displayed, use the UP/DOWN arrows to move around the options on the screen and use SELECT on the remote control to select options. Some DVDs also allow you to use the number buttons on the remote to select an option on a menu screen.

► **DVD Information and Playback Settings**

DVD Banner. Press the INFO button while a video DVD is playing to show the DVD banner. You can hide the banner by pressing CLEAR or LEFT arrow. The DVD banner shows the time, the currently playing DVD title number and chapter number, and how far you are into the title and chapter. On the right side of the banner are selectable icons that let you change DVD settings. Use the UP and DOWN arrows to highlight an icon, then press SELECT to change one of the following settings:



Title Search. Select to search for a title, chapter, or time. (See page 40.)



Repeat Setting. Select to choose a different repeat setting for the DVD. You can choose to repeat an individual chapter or a whole title.



Camera Angle. Selectable if you are watching a DVD with multiple camera angles. Select to change the camera angle.



Audio Track and Subtitle. Select to change audio track or subtitle language.

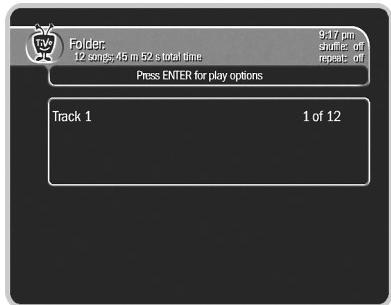


Progressive Output. Appears if the Progressive Output video setting is set to “Progressive.” Select to change the setting. (See page 65.)

 If you have turned on Parental Controls for DVDs, you may need to enter a password to watch some DVDs.
(See page 53 for details.)



 **The Recorder does not produce TiVo sound effects when playing an audio CD.**



► MP3 and Audio CD Information and Playback Settings

The Recorder can play audio CDs as well as MP3 music files. It can also read music playlists that are in the most common format, M3U.

Browsing a Music Disc. Inserting a CD makes a “Play” option available on the Recorder’s DVD menu. With a music disc loaded, selecting “Play” lets you browse the disc’s contents. Press ENTER while browsing to change the order in which the contents display.

Finding Information for Music. Press INFO while music is playing to see the music banner, which shows time and track information for the current disc. It disappears automatically after a few moments.

The Recorder also shows a blue song info banner in the center of a black screen while music is playing. For audio CDs, the song info banner shows the current track number and the total number of tracks. If the files on an MP3 disc include tags with the song title, artist and album, the banner shows that information.

If you do not press a button on the remote or the front panel, the song info banner will change positions a few times every minute. Pressing CLEAR hides the song info banner and the music banner.

Changing the Play Order of Music. Press INFO to see the music banner, then press ENTER to see Music Play Options. Use the RIGHT and LEFT arrows to change them.

- **Shuffle.** (On, Off) When Shuffle is on, music tracks play in random order. When it is off (the default), they play in the order they are arranged on the CD or in the current playlist. Using SKIP FWD (▶▶◀) and SKIP BACK (◀◀▶) while Shuffle is on skips to the next or previous randomly selected track.
- **Repeat.** (One, All, None) Set Repeat to “One” to repeat an individual track, or to “All” to repeat the whole CD. If Repeat is set to None, the full disc plays once then stops.

► Control Buttons

Use the remote's control buttons to control DVDs, CDs, and recorded programs.

DVD, CD, and Recorded Programs

- ▶ **PLAY:** Press to play at normal speed.
- ⏸ **PAUSE:** Press to pause. Press PAUSE again or press PLAY to resume playing.
- ▶▶ **FWD:** Press FWD up to three times to increase fast forward speed. Press it a fourth time (or press the PLAY button at any time) to play at normal speed.
- ◀◀ **BACK:** Press BACK up to three times to increase rewind speed. Press it a fourth time (or press PLAY at any time) to play at normal play speed.
- ▶▶ **ADVANCE:** Press to advance to the end of a program. Press again to return to the beginning. Pressing ADVANCE while fast forwarding or rewinding skips to the next or previous tick mark on the status bar.
- ⟳ **INSTANT REPLAY:** Press to go back approximately eight seconds.

DVD and CD Only

- ▶▶ **SKIP FWD:** Press SKIP FWD (the CHAN/PAGE UP button) to go to the beginning of the next chapter on a DVD or the next track on a CD.
- ◀◀ **SKIP BACK:** Press SKIP BACK (the CHAN/PAGE DOWN button) once to go to the beginning of the current chapter on a DVD or track on a CD, press it again to go to the previous chapter or track.



If the Recorder is playing an MP3 music file that is larger than 10 megabytes and that was recorded with a variable bit rate (VBR), control buttons such as BACK, FWD, and INSTANT REPLAY will not work. A special transparent version of the status bar (with no green segment) is also used for such MP3 files. Most MP3 recordings of popular music will not be this large.

DVD and Recorded Programs Only

- ▶ **SLOW:** Press to slow down the play speed. Press PLAY to restore normal playback.
- ▶▶ **FRAME FORWARD:** After pressing PAUSE, each time you press FWD steps forward to the next frame.
- ▶◀ **FRAME BACK:** After pressing PAUSE, each time you press BACK steps back to the previous frame.

Buttons that are temporarily disabled. Some control buttons may be disabled during portions of DVD or CD. For example, control buttons are often disabled during the opening titles of a DVD. If you press a control button while it is disabled, a red circle with a slash (🚫) appears on screen.

▶ The Status Bar

The status bar appears when you press a control button (such as PLAY, FWD, or INSTANT REPLAY). It shows the length of the current DVD title or CD track. A vertical white line shows where you are in the current title or track and the symbols under the bar show which control buttons are in use. Press CLEAR to hide the status bar.

▶ Searching for a Title, Chapter, Track, or Location on a Disc

CDs generally have multiple music tracks and DVDs are generally divided into one or more titles. A DVD's titles may be further subdivided into chapters. Your Recorder offers different ways of accessing the information on a DVD or CD:

- Search for titles or chapters on a DVD-Video
- Search for tracks on a CD
- Select the point in time to start playback.

The Status Bar During Disc Playback

Press ADVANCE while you fast forward or
rewind to jump to one of the evenly spaced
tick marks.



Symbols here show
which control
buttons are in use.
This line shows
where you are in the
DVD or music title.

Search Via the Search Disc Screen. To search for a specific title on the disc or a specific chapter or time within a title, go to TiVo Central, select DVD, then select “Search for a title, chapter, or time.” From the Search Disc screen, select a title number, a title and chapter number, or a title number and time. Press SELECT when done.

Search Via Remote Control.

- **DVD.** Press the number buttons while the disc is stopped and the Recorder goes to that title. Press the number buttons while the disc is playing and the Recorder goes to that chapter of the current title.
- **CD.** Press the number buttons while playing a disc and the Recorder goes to that track. This does not work if “shuffle” is on. (See page 38.)

▶ Changing the DVD Camera Angle

Some DVDs feature scenes shot from two or more angles. When you play back a scene recorded from multiple camera angles, an angle icon (1) appears on the screen and in the DVD Banner. The number in the icon tells you which of the available angles you are currently using.

To change the camera angle:

- Press the WINDOW button while a scene with multiple angles is playing, or
- Press the INFO button to view the DVD banner. Use the DOWN arrow to highlight the angle icon, then press SELECT to change the angle.

To turn the angle indicator on or off:

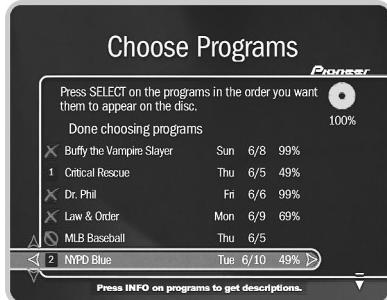
- Press the TiVo button to go to TiVo Central. Select Messages & Setup, then Settings, then DVD, then “Angle Indicator.” Select “On” or “Off.”





* Some content may not be copied due to copy protection rights over the material. For more details, see “Copy Protected Material” on page 35.

DVD recordings that you make using this Recorder are for your personal use only; see page 35. You may not sell, lend, or rent them to other people.



► Recording a DVD

You must complete Guided Setup before you can play CDs, and play or record DVDs. For instructions, see “Completing Guided Setup” on page 3.

Your Recorder can copy programs from Now Playing to DVD. Copying* to DVD does not interfere with recording TV programs or watching live TV.

► What can be copied

Only programs in Now Playing can be copied to a DVD. (Now Playing can contain content recorded from live TV, a video camera, or video tapes.) Programs must have completed recording to Now Playing before being copied to DVD. The following are reasons the Recorder may not be able to copy a program to DVD:

- Some programs may not be copied due to copy protection rights over the materials.
- Programs transferred to the Recorder from a different kind of TiVo DVR (e.g., using Home Media Option), may not be copied to DVD.
- If a recording is less than 2 minutes long, it cannot be copied.

► To Copy* Programs to a DVD

1. From TiVo Central, select DVD, then “Copy programs to DVD.”
2. Insert a DVD-RW (rewritable) or a blank DVD-R (record once) disc. For a complete list of compatible discs, page 32.

Choose programs

3. Choose programs to copy*. Programs in Now Playing that can be copied have a box next to them (); programs that cannot be copied have a red circle with a slash ().

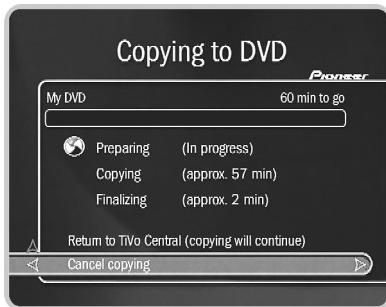
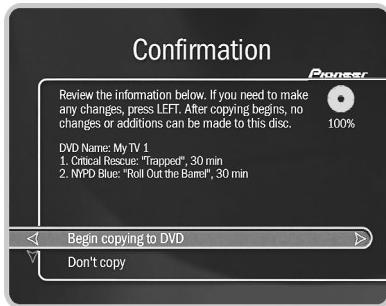
- You can select as many programs as will fit on a DVD (several short programs or fewer longer ones), up to a maximum of 24. Programs that can be copied but will not fit with the other programs selected on the current disc have a red “x” beside them (X).
 - Programs will be recorded in the order you choose them. To change the order, remove programs from the list by highlighting them and pressing SELECT; then select them again in the order you want them to record.
 - The percentage wheel in the upper right-hand corner of the screen provides a close estimate of how much of the DVD would be filled by the selected programs. It updates automatically.
4. When you are ready to continue, press RIGHT arrow (or select “Done choosing programs”).
 5. If you are recording a single program that is too large to fit on a DVD, you see the Choose Part to Copy screen. You can use the RIGHT and LEFT arrows to change the part that will copy. Press SELECT to continue.

Name the disc and begin copying

6. If you are copying only one program, the Recorder suggests using that program’s name for the DVD. You can use that name or choose to enter a name.
7. You can name the DVD that is being created using the standard TiVo on-screen keyboard. Enter the name of your recording by using the arrow keys on your remote control to highlight a character, then press SELECT. Use THUMBS UP and THUMBS DOWN to change to uppercase or lowercase. Select “Done entering name”

 If you choose to record only one program and it is too large to fit on a single DVD, the Recorder will attempt to save segments of it to multiple DVDs.

 You may require multiple DVDs when copying content longer than one hour that was originally recorded in Extreme (Fine) quality.



Copying content to DVD is a great way to archive your video tapes.

First, record the video tape content to Now Playing (see page 25 for details) and then copy the saved content to DVD.

when you are finished. If only copying one program or if all programs have the same name, you are offered a default name.

8. Confirm your selections and start the copying process. While your DVD is being created, its status displays. If you go to another screen, or to live TV, pressing the DVD button returns you to the status screen. If copying to DVD causes disk space conflicts, you will be notified and given the option to continue or cancel.

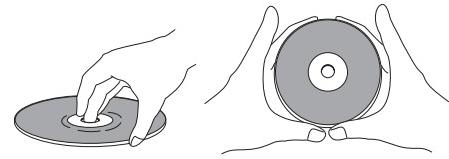
You can cancel a Copy to DVD that is in process. You will be notified whether the disc can be re-used (DVD-RW) or not (DVD-R).

Finalizing the disc

9. All DVDs are automatically finalized at the end of the DVD copying process. Finalizing means:
 - A title is created for each program copied. Chapter marks are placed every 5 minutes. You cannot turn chapter marks off.
 - A DVD “Disc” menu is created that lists the title of each program on the disc.
 - DVDs you create have no DVD Parental Controls rating, so they cannot be blocked by Parental Controls unless Parental Controls are set to block all DVDs. See page 55 for details.
 - The closed captioning of the original program is maintained.
10. After the DVD is finalized, it appears in the on-screen menus just as any other finished DVD would. A DVD-RW disc can be used again, but if you re-use it all of the programs on it will be erased.

► Disc Care

How to hold discs. When loading or removing discs, try not to touch their playing surfaces.



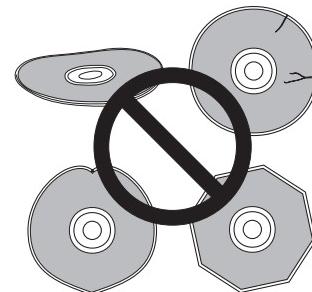
Never play a cracked, scratched, or warped disc. This may damage the Recorder or cause it to malfunction.

Never use discs with special shapes. CDs with special shapes (heart-shaped, octagonal, etc.) cannot be played on the Recorder. Attempting to do so may damage the Recorder.

Cleaning. Fingerprints or other dirt on the disc may affect sound and picture quality. To clean your discs, use a soft clean cloth to wipe them. If necessary, moisten a soft cloth with diluted neutral detergent to remove heavy dirt or fingerprints.

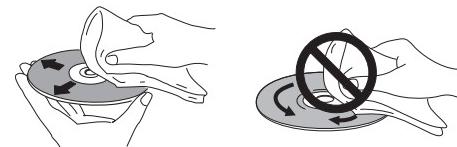
- Do not wipe in a circular direction. (Concentric scratches in the disc groove tend to cause noise.)
- Gently wipe from the inside toward the outer edge.

Discs must not be cleaned with record cleaning sprays, or static prevention sprays, etc. Also do not use volatile liquids such as benzine, or thinner, etc.



After using discs, store them upright. After playing a disc, always remove it from the Recorder and return it to its jacket. Then store it standing upright away from heat and humidity.

- Store discs carefully. If you store discs at an angle, or stacked on top of each other, discs may become warped even when in their jackets.
- Do not leave discs in locations such as the seat of a car, which may become excessively hot.



CHAPTER 5

Messages & Setup

Messages	48
Settings	49
System Information	67
Troubleshooting	67
Restart or Reset System	68
Sleep	69



►► Messages

Select this to read messages from the TiVo service or alerts from your Pioneer DVD Recorder with TiVo. When you receive a new message, “Read New Messages & Setup” appears on TiVo Central.

To read the messages:

1. Go to TiVo Central, then select Read New Messages & Setup, then Read New Messages. A list of all of your messages appears. Messages you have not read are indicated by an envelope (✉) icon.
2. Use the UP/DOWN arrows to highlight a message, then press SELECT to read it. CHAN UP/DOWN lets you page through a message if it doesn't fit on the screen.

► Settings

Selections in Settings help make the Recorder work more to your liking: you can set the default Recording Quality, Parental Controls, customized channel lists, and other options.

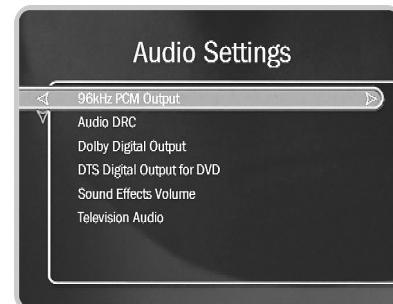
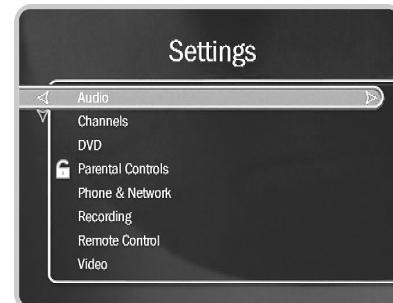
► Audio

Your Recorder can send an analog or digital audio signal to your TV or stereo amplifier/receiver. To enjoy multichannel surround sound, you will need to connect the Recorder to your amplifier/receiver using an Optical Digital Audio cable (not supplied; see the *Installation Guide*). You should choose the audio settings below to match the capabilities of your amplifier/receiver.

96kHz PCM Output. PCM (Pulse Code Modulation) is the most common system of encoding digital audio. Sound can be turned into digital audio data at different sampling rates; the higher the rate, the better the quality. If your amplifier/receiver is compatible with 96kHz sampling rate audio, then choose “96kHz.” Otherwise, leave it set to “96kHz to 48kHz” (the default). PCM soundtracks are mono or stereo only.

Audio DRC. When watching Dolby Digital DVDs at low volume, it’s easy to lose low level sounds completely, including some of the dialog. Turning on Audio DRC (Dynamic Range Control) can help by making quiet sounds louder and loud sounds quieter. Audio DRC is not effective if Dolby Digital Output is set to “Dolby Digital” (see below). In that case, you must use your amplifier/receiver to adjust the dynamic range.

Dolby Digital Output. Dolby Digital audio soundtracks can be mono, stereo or contain up to 5.1 channels (surround sound). If your Recorder is connected to an amplifier/receiver that has a built-in Dolby Digital decoder, choose “Dolby Digital” (the default). Otherwise, choose “Dolby Digital to PCM.” If you choose “Dolby Digital,” you might not hear TiVo



sound effects when playing Dolby Digital content. If you choose “Dolby Digital to PCM,” you will not have 5.1 surround sound capabilities.

DTS Digital Output for DVD. DTS (Digital Theater Systems) is another 5.1 channel surround format sometimes used on DVD-Video discs. If your Recorder is connected to an amplifier/receiver that has a built-in DTS decoder, choose “On.” Otherwise, choose “Off” (the default). If this setting is off, you will not hear audio when playing a DVD with DTS.

Sound Effects Volume. This setting allows you to change the volume or turn off your Recorder’s sound effects (the tones played when you press buttons on the remote control). The default setting is Medium.

Television Audio. This setting lets you select the Recorder’s default audio output option. You can choose to have the default audio in stereo or mono, or have a secondary audio program (SAP) recorded when one is available.

Secondary audio programs are generally audio broadcasts in a language other than English. If you choose to record SAP and there is a secondary audio program, it is recorded. The SAP may be in Spanish, French, Japanese, or another language.

► Channels

There are five selections available in Channel Settings (depending on your setup, not all selections may appear):

Cable Lineup. Select this if you have changed your subscription package or your channel lineup looks wrong in Channels You Receive. On the next screen, you’ll be able to choose among available service packages based on your ZIP code.



 In the event that there is a change to your cable or satellite lineup, a TiVo message will let you know what the change is. You must then go to Settings, select Channels, then make the Channels You Receive list reflect the change.

Channel Banner. Normally, when you change channels, a Channel Banner is displayed for a few seconds. If you want the channel banner to disappear quickly, select “Clear banner quickly.”

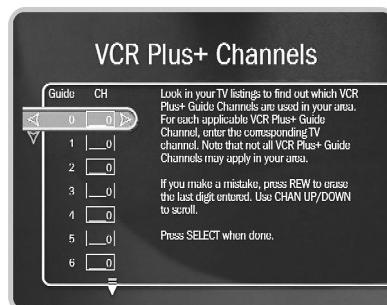
Channel Changing. Use this selection if you change the type of control cable (IR or Serial) you use to change channels on your cable or satellite box, or if your cable or satellite box is replaced by another make or model. These screens are described on page 6.

Channels You Receive. The Channels You Receive list starts with all the channels included in your service package. It can be customized to include only channels you actually subscribe to and to reflect your viewing preferences. (For example, if you never watch a channel and don’t plan to set up any recordings on it, or let the TiVo service search for programs on it, you can de-select it here.) Your Recorder uses this customized “channel list” to decide which channels the TiVo Live Guide displays.

To set up a custom channel list:

- From the Channel Settings screen, select Channels You Receive. A checkmark appears to the left of channels that are part of the selected list.
- To remove or add a channel, highlight it and press SELECT. (You can speed through the list with CHAN UP/DOWN. To go directly to a specific channel, press the number buttons, then press ENTER.)
- Your changes are saved automatically. Press LEFT or RIGHT arrow to return to the Channel Settings screen.

VCR Plus+ Channels. You must set up VCR Plus+ channels in order to make recordings using the PlusCode programming number. Look in your local TV listings to find out which VCR Plus+ Guide channels are used in your area. For each applicable VCR Plus+



Guide channel, enter the corresponding TV channel. If you make a mistake, press the BACK button to erase the last digit entered. Not all VCR Plus+ Guide channels may apply in your area.

★ Upgrade to TiVo Plus

If you upgrade to TiVo Plus, you'll also have access to **Favorite Channels**. The Favorite Channels list is for channels you watch frequently. Include only a few channels in this list, so that you can quickly look at what's coming up on them. (See page 80.)

► DVD

There are two selections available in DVD Settings:

Angle Indicator. Some DVDs feature scenes shot from two or more angles. During those scenes, an angle indicator appears on the screen ( 1). If you do not want to see the angle indicator, select "Off."

Language & Subtitles. You can select the preferred audio and DVD menu languages (default is English). If that language is available on a DVD, the Recorder will use it instead of any others. You can also change the subtitle settings:

- Subtitle language. (Default is English.)
- Subtitle display. On or Off. (Default is Off.)



► Parental Controls

Use Parental Controls to set limits on television and movie ratings for programs on DVDs, in live TV, or in Now Playing, and to lock specific channels so that a password is required to view them. If you try to watch a program that violates a Parental Control, you will be asked for the password. In addition, when Parental Controls are on, you must enter a password to delete a program from Now Playing that violates a Parental Control.

The padlock icon shows the current state of Parental Controls:

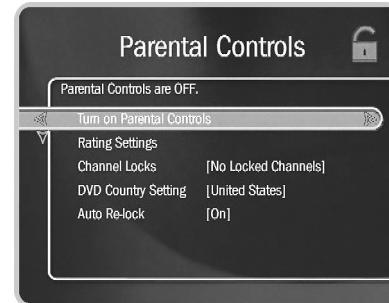
 **Off.** No password or controls set. Padlock appears unlocked and dark.

 **On.** Password and controls set. Padlock appears locked and bright.

 **Temporarily off.** Controls set but password was entered to temporarily turn off Parental Controls. Padlock appears unlocked and bright.

While Parental Controls are on, you can watch a locked program or channel by pressing SELECT, then entering the Parental Controls password. This temporarily turns off Parental Controls.

The large version of the channel banner has a shortcut to Parental Controls; see page 29 for details.





 When you turn Parental Controls off,  you don't need to know a password to turn them back on. You may prefer to temporarily turn off Parental Controls, so that another person in your household does not choose a new password.

To turn on Parental Controls and define a password ():

Select “Turn on Parental Controls,” then use the number buttons on the remote control to enter a four-digit password. Enter the same password on the next screen to confirm.

To temporarily turn off Parental Controls ():

- Enter your password to watch a program or channel—Parental Controls are temporarily turned off, or
- Select “Temporarily turn off Parental Controls” on the Parental Controls screen, then enter your password.

When Parental Controls are temporarily turned off, any program or channel can be viewed, but the correct password is still required to change Parental Controls settings.

To re-enable Parental Controls ():

If Parental Controls are temporarily off and you want to re-enable them:

- On the Parental Controls screen, select “Turn Parental Controls back on,” or
- Put the Recorder in Sleep mode, then take it out of Sleep mode. To do this, select Messages & Setup, then Sleep, then press the TiVo or LIVE TV button.
- If Auto Re-lock is “On,” Parental Controls are re-enabled automatically if the Recorder is not used for four hours.

Rating Settings for TV and Movies (🔒)

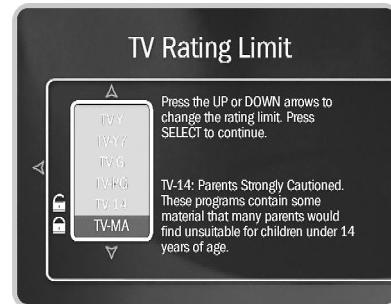
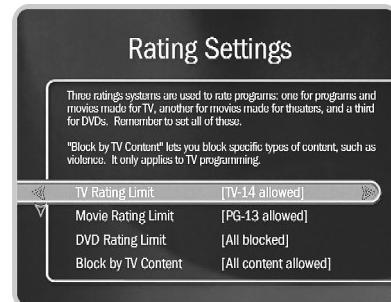
Movies that are originally meant for release to theaters have a different rating system from programs that are made for TV. You can use Parental Controls to set limits for both rating systems (see page 57). There is also a rating system for TV content that allows you to set limits for specific types of content that may be objectionable, such as sexual content or violence. Remember, these limits do not apply to DVDs. To change DVD Parental Controls, select DVD Ratings from the Ratings Settings screen.

To set Rating Limits for TV and movies:

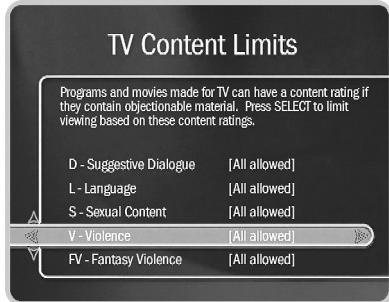
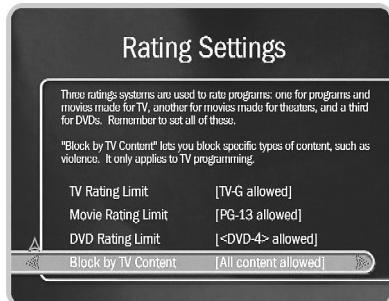
1. From Parental Controls, select “Rating Settings,” then enter your password.
2. Select the kind of limit you want to change: TV or Movies.
3. The next screen contains a box listing all potential ratings. Ratings shaded in green are not locked; ratings in red are locked. Use the UP and DOWN arrows to move the red shading and adjust which ratings are locked. Your changes are saved automatically. When you are done, press RIGHT or LEFT arrow to return to Parental Controls.

To set Rating Limits for DVDs:

1. From Parental Controls, select “Rating Settings,” then enter your password.
2. Select “DVD Rating Limit.”
3. Change the DVD Rating limit. This limit’s meaning may change depending on the country selected on the DVD Country Setting (see page 58).



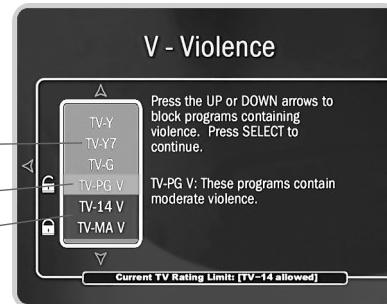
 If a DVD has no Parental Controls rating, a password is only required if you choose to require a password for all DVDs. To do this, set the DVD Rating Limit to cover all ratings (all red).



To set Rating Limits for specific TV content:

- From Parental Controls, select "Rating Settings," then enter your password.
- Select "Block by TV Content."
- You see a list of categories. Select a category (for example, V-Violence)
- The next screen shows a box with all possible ratings. Ratings in green are not locked; ratings in red are locked. (Ratings in gray do not apply to the category. For example, a TV-Y program would not have *V-Violence* content so there is nothing to block.)

Use the UP and DOWN arrows to adjust which ratings are locked or unlocked. The display to the right of the box changes to tell you exactly what ratings level you are allowing. Your changes are saved automatically. When you are done, press RIGHT or LEFT arrow to return to Parental Controls.



Motion Picture Association of America Ratings for Movies:

G: General Audiences. Most parents would find this material suitable for all ages.

PG: Parental Guidance Suggested. Parents may find portions of this material unsuitable for younger children.

PG-13: Parents Strongly Cautioned. This material contains portions many parents would find unsuitable for children under 13 years of age.

R: Restricted. This material is specifically designed to be viewed by adults and therefore may be unsuitable for children under 17.

NC-17: Adult Content. This material contains intense, disturbing, or graphically portrayed themes or content that are not suitable for viewing by children under 17.

AO: Explicit Sexual Content. This material contains explicit sexual content and is intended to be viewed by adults ONLY.

Ratings for Television Movies and Programs (Including Content Ratings):

TV-Y. All children. This program is designed to be appropriate for all children. Whether animated or live action, the themes and elements in this program are specifically designed for a very young audience, including children from ages 2-6. This program is not expected to frighten younger children.

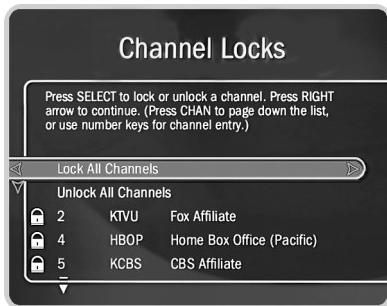
TV-Y7. Directed to older children. This program is designed for children age 7 and above. Themes and elements in this program may include mild fantasy or comedic violence, or may frighten children under the age of 7. Programs where fantasy violence that may be more intense or more combative than other programs in the TV-Y7 category are designated TV-Y7-FV.

TV-G. General audience. Most parents would find this program appropriate for all ages. Although this rating does not signify a program designed specifically for children, most parents may let younger children watch this program unattended. It contains little or no violence, sexual dialogue, or situations; and no strong language.

TV-PG. Parental guidance suggested. This program contains material that parents may find unsuitable for younger children. Many parents may want to watch it with their younger children. The theme itself may call for parental guidance and/or the program contains one or more of the following: moderate violence (V), some sexual situations (S), infrequent coarse language (L), or some suggestive dialogue (D).

TV-14. Parents strongly cautioned. This program contains some material that parents would find unsuitable for children under 14 years of age. Parents are strongly urged to exercise greater care in monitoring this program and are cautioned against letting children under the age of 14 watch unattended. This program contains one or more of the following: intense violence (V), intense sexual situations (S), strong coarse language (L), or intensely suggestive dialogue (D).

TV-MA. Mature audiences only. This program is specifically designed to be viewed by adults and therefore may be unsuitable for children under 17. This program contains one or more of the following: graphic violence (V), explicit sexual activity (S), or crude, indecent language (L).



Channel Locks for Live TV (🔒)

You can lock individual channels so that a password is required to view any program on those channels. To lock or unlock channels:

1. On the Parental Controls screen, select “Channel Locks,” then enter your password.
2. A channel list appears with a padlock icon to the left of locked channels. Highlight a channel and press SELECT to add or remove a padlock icon. Use CHAN UP/DOWN to move through the list quickly. To highlight a specific channel, press the number buttons, then press ENTER.
3. Your changes are saved automatically. When you are done, press RIGHT or LEFT arrow to return to Parental Controls.

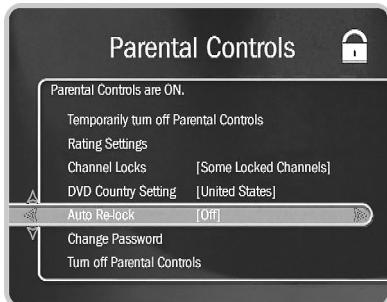
DVD Country Setting

The numeric DVD rating system (1 to 8) is used internationally, but ratings have different meanings in different countries. When Parental Controls are on, the Recorder uses the DVD rating system of the country selected on this screen.

Auto Re-lock Option

By default, the Auto Re-lock option is “On.” This means that when Parental Controls are temporarily turned off, they re-lock automatically after four hours of no remote control or front panel button activity. Parental Controls won’t re-lock in the middle of a program.

To turn off Auto Re-lock, go to Parental Controls, then select “Auto Re-lock.” Enter your password, then highlight and select “Auto Re-lock off.”



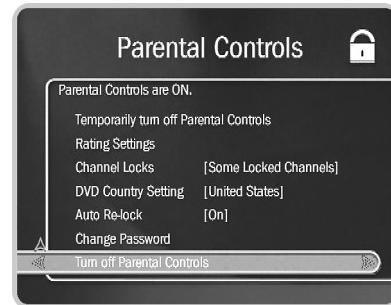
To change the password (🔒):

To change the password for Parental Controls, Parental Controls must be on.

1. Select “Change Password” on the Parental Controls screen, then enter your old password.
2. Enter a new password, then re-enter it for confirmation.

To turn off Parental Controls (🔓):

Select “Turn off Parental Controls,” then enter your password. With Parental Controls off, the password is deleted and no channels or programs are restricted.



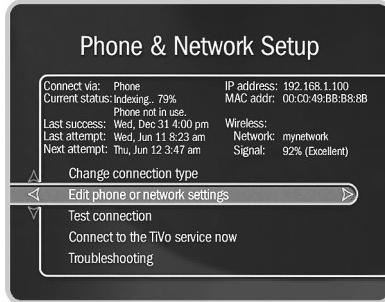
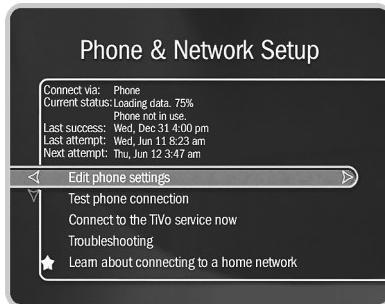
5

▶ **Phone & Network**

While the Recorder requires a phone line during Guided Setup, after Guided Setup, it must also make a brief, periodic connection to the TiVo service to get program information for the TiVo Live Guide, and updates to Showcases and TiVolution Magazine. This periodic connection can be made over a phone line or over the Internet. To use the Internet, you must connect the Recorder to a home network that includes a shared broadband Internet connection (such as DSL or Internet through a cable modem). For more information on connecting to a home network, see Chapter 8, “Connecting to a Home Network.”

The Recorder usually uses either the phone line or broadband connection for less than ten minutes. You may also receive service updates to your Recorder from time to time. In such cases, the connection time may be longer.

On the Phone & Network screen, you can see details (including the time of the last successful connection to the TiVo service and last connection attempt), as well as the status of the last connection.



The Phone & Network Setup screen has different selections depending on whether or not you have connected a network adapter to your Recorder. Before you connect a network adapter, you will see these selections:

- **Edit phone settings.** This selection takes you to the Phone Dialing Options screen. Selections on this screen are explained in detail on page 61.
- **Test phone connection.** Select this to start a test connection to the TiVo service. You may wish to use this option for troubleshooting or other unusual circumstances. Test connections usually only take a couple of minutes. When the connection has finished, press SELECT to continue.
- **Connect to the TiVo service now.** Under normal use, you do not need to connect to the TiVo service manually. However, for troubleshooting or other unusual circumstances, you may wish to use this option. After you start the connection, the status indicator reads “Starting Up” and will change as it goes through several stages. You can watch live TV, set up recordings, and search for programs while the connection is in progress.
- **Troubleshooting.** This selection takes you to the Troubleshooting screen, where you will find Phone Troubleshooting and Network Troubleshooting steps among other selections.
- **Learn about connecting to a home network.** Before you connect a network adapter to your Recorder, the Phone & Network Setup screen will display this selection with a yellow star. See Chapter 8 for more information about connecting your Recorder to a home network.

After you connect a network adapter to your Recorder, you will no longer see “Learn about connecting to a home network.” You will have two new selections available:

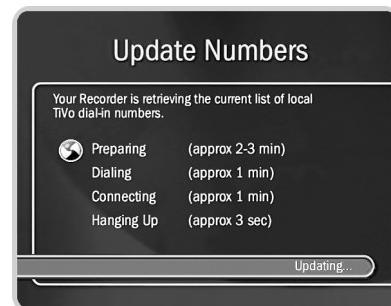
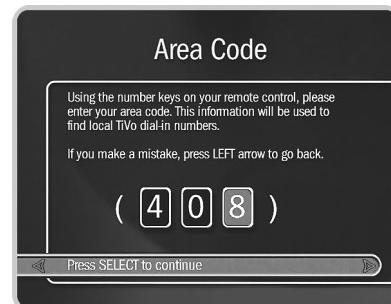
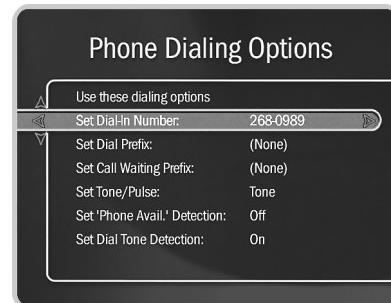
- Change connection type.** This allows you to change how the Recorder connects to the TiVo service, by phone or using your home network's shared broadband Internet connection.
- Edit phone or network settings.** The Phone & Network Settings screen has selections for Phone Dialing Options (see below for details), TCP/IP Settings, and Wireless Settings. See Chapter 8 for more information about TCP/IP Settings and Wireless Settings.

▶ Phone Dialing Options

Change Dialing Options. You can change the following settings (if you make a mistake while entering a change, use the BACK button to backspace). After making any changes to dialing options, you must select “Accept and test new options.” The Test Phone Connection screen appears; press SELECT to test the connection. When the connection completes, you should see the message “Test Succeeded!” Press SELECT to return to Phone Dialing Options.:.

Set Dial-In Number. Use this to change the number the Recorder uses to make connections to the TiVo service. To change it:

1. Select “Set Dial-In Number.” The Area Code screen appears.
2. Use the number keypad on the remote to set the area code, then press SELECT. If you change the area code, or if the Recorder has not made a connection to the TiVo service in the last twenty-four hours, the Update Numbers screen appears and the Recorder connects to the TiVo service to retrieve a list of local dial-in numbers. After the connection, press SELECT. The Dial-In Number screen appears.
3. Use the UP/DOWN arrow to choose one of the listed phone numbers. The Recorder will use this number for connections to the TiVo service. Then press SELECT.



If your area code has no access numbers, you can press LEFT arrow to return to the Area Code screen and try a nearby area code. Toll charges may apply and are your responsibility.

4. The Dialing Format screen appears after you have chosen a dial-in number. You should use this screen to tell the Recorder which dialing format to use. For example: should the dial-in number be preceded by your area code and should a “1” precede the area code? In some areas, even local numbers must be dialed using the area code. Press SELECT to return to the Phone Dialing Options screen.

Set Dial Prefix. Use this option if you normally dial a prefix before making a phone call (for example, if you need to dial “9” to get an outside line). Use the number keys on the remote control to enter the prefix. Press the PAUSE button after you have entered the prefix. This will insert a comma, which will create a two second pause after the prefix is dialed.

Set Call Waiting Prefix. If you have call waiting, you may choose to disable it while the Recorder is making a call, so that the Recorder’s phone call is not interrupted. If you do not disable it, the Recorder may drop the call and allow the second call to ring through, depending on your phone system. The Recorder will then try its call again later. The most common code that phone companies use to disable call waiting is *70 (check with your phone company to find out how to disable call waiting in your area). Press the PAUSE button after you have entered the prefix. This will insert a comma, which will create a two second pause after the prefix is dialed.

Set Tone/Pulse. If your phone system uses pulse dialing, rather than tone dialing, you can change the setting to pulse here. (Today, most phone systems are tone.)

Set “Phone Avail.” Detection. When Set ‘Phone Avail.’ Detection is on, the Recorder can determine whether the phone line is in use by detecting voltage on the line. This allows it to avoid disrupting a call in progress (such as another modem call).

This setting is off by default. With ‘Phone Avail.’ Detection off, you may hear a click if you are on the phone when the Recorder tries to connect. If you have another modem call in progress (on your computer or other device), that call may be disrupted if the Recorder attempts to connect to the TiVo service. If you have a standard dial tone, and ‘Phone Avail.’ Detection is off, turn on Dial Tone Detection (below).

If you are experiencing “Failed, Line unavailable” errors, or if the Recorder is not connecting to the TiVo service, you may have a low-voltage phone system that the Recorder cannot detect. In this case, it’s best to have ‘Phone Avail.’ Detection off.

Set Dial Tone Detection. This setting is on by default. If you leave it on, the Recorder will check for a dial tone before it starts dialing. However, if you have a non-standard dial tone, or a stuttering dial tone (as some voice messaging systems have), the Recorder will be unable to detect the dial tone and will not make its daily call.

Restore previous options. The Recorder must make a successful test connection before it will accept changes to Phone Dialing Options. If you want to restore your previous dialing options and continue past this screen without making a test connection, select “Restore previous options.”

► Recording

The Recorder offers you four levels of Video Recording Quality. The choice you make on this screen is used each time you schedule a recording.

The recording quality choices available are Extreme (Fine), High (SP), Medium (LP), and Basic (EP). The default is High (SP). Basic (EP) quality takes up about one-third the space



With Dial Tone Detection and ‘Phone Avail.’ Detection both turned off, if you happen to be talking on the phone when the Recorder tries to call you will hear the modem dial and try to connect to the TiVo service.



With TiVo Plus service, you can set the video recording quality independently for each recording you schedule.

of Extreme (Fine) quality, so it gives you about three times the amount of space for programs. You may wish to experiment with different levels and then reset your default. This screen also shows you how about how many hours of programming recorded at a given quality level will fit on a DVD.



You can also check the Recording Quality screen to see how many hours of programming at different quality levels will fit on the Recorder.

Quality Level	Extreme (Fine)	High (SP)	Medium (LP)	Basic (EP)
Quality vs. Recording Space	Best video quality, but can record the fewest programs on your Recorder.	Better video quality than Medium, but can record fewer programs on your Recorder.	Better video quality than Basic, but can record fewer programs on your Recorder.	Basic video quality; can record the most programs on your Recorder.
Suggested Uses	Sports, Action Movies	Dramas, Films	Daytime Talk Shows, Animation	News
Amount that fits on a DVD	About 1 hour	About 2 hours	About 4 hours	About 6 hour

The Recorder automatically uses Extreme (Fine) Quality when displaying and recording live TV. However, when it records a scheduled program via the To Do List, the Recorder uses the Video Recording Quality you specified as a default in this setting. If that quality is not Extreme (Fine), you may notice the difference when recording starts.

► **Remote Control**

You can use your Recorder's remote to control the power, volume, mute, and TV input settings on your TV or A/V Stereo System. Select your TV or A/V Stereo System brand and then follow the on-screen instructions as you step through the various codes to program the Recorder's remote control. See the *Installation Guide* for more information.

▶ Video

You can customize the Recorder to match the capabilities of your TV with Video Settings.

Connection to Recorder. Select this if you change the type of video cable you used to connect your cable or satellite box to the Recorder—for example, if you decide to replace a Composite A/V cable connection with an S-Video cable. The next screen you see depends on whether you have one or two video sources. See page 6 for details on the Connection to Recorder screens.

Progressive Output. This setting allows you to choose the type of video signal output by the Recorder. Interlaced scan video is the standard method of displaying a picture on your TV. All TVs are compatible with Interlaced scan, and this is the default setting.

Progressive scan video is a method of displaying a more stable, flicker-free picture on your TV. If your TV is compatible with progressive scan and it is connected to your Recorder with a Component Video cable (not supplied), choose Progressive. If you change this setting, your TV may flicker or go black for about fifteen seconds.

If you choose Progressive, these additional selections appear on the Video Settings screen:

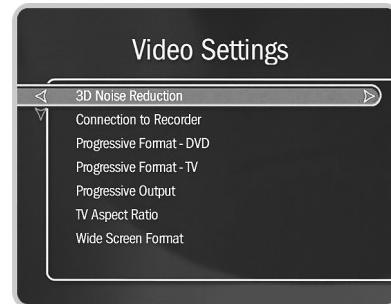
3D Noise Reduction. If your TV is compatible with Progressive, you can enable, disable, or change digital video noise reduction settings. To reduce the amount of noise in the video, choose “On.” (This option only appears if you have the Recorder set to Progressive Output.)

Progressive Format - DVD. By default, the Recorder automatically detects whether a DVD viewed in progressive format should be shown in Film or Video format. In very rare circumstances, auto detection may result in poor image quality for DVDs that should be displayed in Video format. In these cases, you can use the Progressive



The Video Settings screen has four options if Progressive Output is off (set to Interlaced).

5



The Video Settings screen has seven options if Progressive Output is on.



**Compatibility of this unit
with progressive-scan TVs:**
This player is compatible with progressive video Macrovision System Copy Guard.
CONSUMERS SHOULD NOTE THAT NOT ALL HIGH DEFINITION TELEVISION SETS ARE FULLY COMPATIBLE WITH THIS PRODUCT AND MAY CAUSE ARTIFACTS TO BE DISPLAYED IN THE PICTURE. IN CASE OF 525 PROGRESSIVE SCAN PICTURE PROBLEMS, IT IS RECOMMENDED THAT THE USER SWITCH THE CONNECTION TO THE "STANDARD DEFINITION" OUTPUT. IF THERE ARE QUESTIONS REGARDING OUR TV SET COMPATIBILITY WITH THIS MODEL 525p DVD PLAYER, PLEASE CONTACT OUR CUSTOMER SERVICE CENTER. This player is compatible with the following Pioneer displays and monitors: PDP-5030HD, PRO-1000HD, PRO-800HD, PDP-4330HD, PRO-720HD, PRO-620HD, PRO-520HD, SD-643HDS, SD-533HDS, PDP-503HDG, PDP-433HDG.

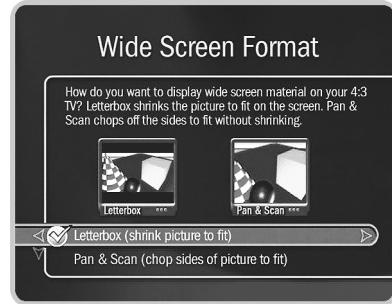
Format Icon on the Channel Banner to turn off auto-detection for an individual DVD (see page 29). This screen gives you the option of turning off the auto-detection feature for all DVDs and always using Video format.

Progressive Format - TV. By default, the Recorder automatically detects whether a program viewed in progressive format should be shown in Film or Video format. In very rare circumstances, auto detection may result in poor image quality for programs that should be displayed in Video format (relatively few programs should use Film format). In these cases, you can use the Progressive Format Icon on the Channel Banner to turn off auto-detection for an individual program (see page 29). This screen gives you the option of turning off the auto-detection feature for all programs and always using Video format.

RF Video Input. If you used an RF coaxial cable to connect your program source to your Recorder, you can choose to smooth the video on this screen, which will decrease any static you may see and improve the picture on some channels. However, it will cause images on all channels carried to your Recorder on an RF cable to lose some sharpness.

TV Aspect Ratio. You can select the image proportions for the type of TV you have: 16:9 (wide screen) or 4:3 (standard).

Wide Screen Format. If you set the TV Aspect Ratio to 4:3, use this setting to determine how you want to display wide screen content. Choose “Letterbox” to shrink the wide screen picture to fit on the TV screen with black bars at the top and bottom. Choose “Pan & Scan” to chop off the sides of the picture to fit on the screen without shrinking.



►► System Information

The System Information screen provides general information about your Recorder, including its service number, manufacturer, model number, software version, storage capacity, and information about recent service connections. You'll need some of this information if you contact Customer Support. You can use the CHAN UP/DOWN button to see the rest of the information on the screen.

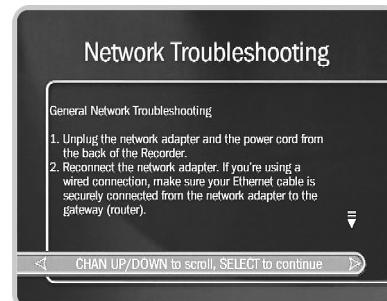
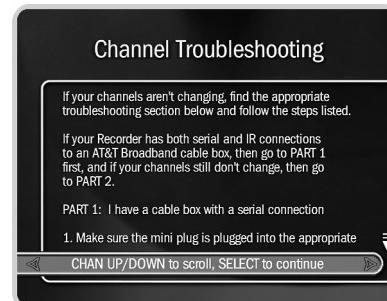
►► Troubleshooting

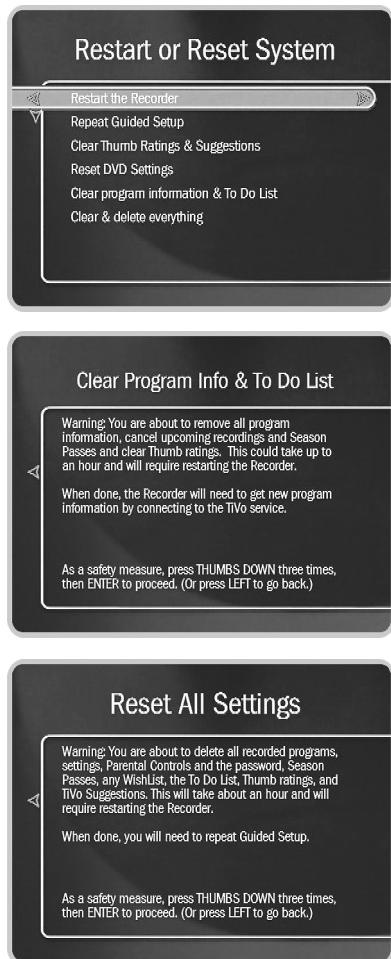
The following screens provide tips that may help you troubleshoot various problems. Use CHAN UP/DOWN to see all of the text on the screens. (There is also extensive troubleshooting available in Chapter 9 of this guide.) There are screens available for:

- Parental Controls Troubleshooting.
- Phone Troubleshooting.
- Channel Troubleshooting. This screen provides tips to help you troubleshoot channel changing problems if you are using a satellite or cable box.

The tips at the top of the screen are for cable or satellite boxes that attach to the Recorder through a serial connection. You may have to use CHAN UP/DOWN to see all the tips, which include cable or satellite boxes using IR (infrared) connections to the Recorder.

- Network Troubleshooting.
- Transfer Troubleshooting. Use this if you are having trouble with the Multi-Room Viewing feature of Home Media Option. See Chapter 7 for more information.





►► Restart or Reset System

You may need to restart the Recorder as a routine troubleshooting step. The other options on this screen erase information and restore original factory settings. Selecting a reset option brings you to a warning screen. To continue, press THUMBS DOWN three times, then press ENTER.

Restart the Recorder. Shuts down the Recorder and starts it up again. It will not affect previously recorded programs. It will interrupt any recordings in progress.

Repeat Guided Setup. You will have to repeat Guided Setup if you move or if you change your cable or satellite provider. Repeating Guided Setup will reset the Channels You Receive list to the factory settings. It will not affect recorded programs.

Clear Thumb Ratings. Removes all Thumbs Up and Thumbs Down ratings.

Reset DVD Settings. Resets all DVD settings, including language, subtitle, and Parental Controls settings.

Clear program information & To Do List. Clears all program information and cancels everything in the To Do List. Does not delete programs in the Now Playing list. The Recorder acquires new program information during the next connection. Completing this process may take over an hour.

Clear and delete everything. Clears all Thumbs Up and Thumbs Down ratings, Now Playing recordings, program information, the To Do List, and setup information (including the Channels You Receive list). Also clears the password and resets Parental Controls to the factory specified default. Completing this process may take over an hour.

►► Sleep

You can put your Recorder in Sleep mode by selecting Sleep in Messages & Setup. To return to normal mode from Sleep, press either the TiVo button or the LIVE TV button.

In Sleep mode:

- Your TV shows a black screen and the lights on the front of the Recorder go out (unless recording).
- Programs that are being recorded or are scheduled to record will still be recorded. The red recording LED will be lit if a recording is in progress.
- The Recorder will still make a connection to the TiVo service, if scheduled to do so.
- If you temporarily turned off Parental Controls, Sleep mode re-enables them. (See page 53 for more on Parental Controls.)
- The Recorder will continue to save a portion of live TV—up to 30 minutes of programming.
- If live TV was paused when Sleep was selected, the Recorder will remain paused for up to 30 minutes.
- If the TiVo Live Guide was set to display a category filter, filtering will be turned off.



5

CHAPTER 6

Features of TiVo Plus

Introduction	72
Recording Programs	73
Finding Your Favorite Programs	79
Finding Programs That Match Your Interests	84
Finding New Programs	90
Grouping & Sorting Programs in Now Playing	92
Copying Programs to a VCR	93

►► Introduction

TiVo Plus is the service level that you've heard everyone talking about—the service level that features smart, automatic recording but is still easy to use. Among the TiVo Plus features are new ways to find programs you want to record, new ways to record programs, new options for the Now Playing list, and for copying programs to VCR.

What would you like to do today?

Record a program (page 73)	Describes Season Passes, recording options, and Season Pass Manager.
Find my favorite programs (page 79)	Describes Search by Title, Browse by Time or Channel, and TiVo Live Guide filters.
Find programs that match my interests (page 84)	Describes WishList searches.
Find new programs (page 90)	Describes TiVo Suggestions, Showcases, and TiVolution Magazine.

Set up recordings. After finding a program, it's easy to schedule a recording. You can schedule one recording or choose one of these options to set up a repeating recording:

- A Season Pass records every episode of a program on one channel (see page 76).
- An auto-recording WishList search records every program a WishList finds (see page 84).
- A manual recording records a chosen time and channel and can be set to repeat once each week, every day, or just on weekdays or weekends (see page 24).

Programs you have scheduled to be recorded appear in the To Do List (see page 28). To watch recorded programs, select them in the Now Playing list (see page 29).

► Recording Programs

The TiVo Plus service gives you smart recording capabilities that can detect when a program's date or time slot has changed, can find the same program across multiple channels, and can even tell first run programs from repeats. In addition, with TiVo Plus you can set a different recording quality for each recording you schedule.

► Season Pass and Other Repeating Recordings

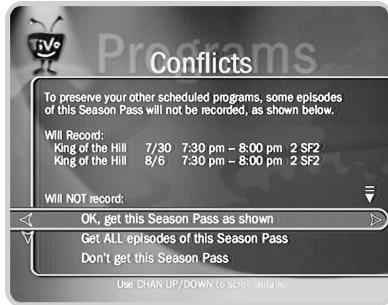
There are two kinds of recordings: individual recordings and repeating recordings. You create an *individual recording* to record a single program, for example, a movie or one episode of a series. You create a *repeating recording* to schedule a recording of several programs at the same time, for example, recording every episode of a series, or every movie with your favorite actor.

There are three different kinds of repeating recordings:

- **Manual Repeat Recording.** If you have used the TiVo Basic service, you are probably already familiar with these. To create a manual repeat recording, you specify a time, a channel, and an interval (for example, every Wednesday from 7 to 7:30 on channel 2), and your Recorder repeatedly records that time and channel. See page 24 for details.
- **Season Pass.** This is the hassle-free way to record a series. A Season Pass can record every episode of a series that airs on a certain channel—even if the date or time slot changes! It is completely automatic and very easy to set up. See page 76 for details.
- **Auto-Recording WishList.** With an auto-recording WishList search, you create criteria for the kinds of programs you want to record (for example, any baseball game with your favorite team, or any movie title), and then programs that match your criteria are recorded, no matter what time or on what channel they air. See page 89 for details.



 An exception to the 28-day rule may occur if the program wasn't watched but was automatically deleted from Now Playing to make room for another recording you requested—or if the program information describes it incorrectly.



These three types of repeating recordings have the following in common:

- **No duplicates within 28 days.** If you watch or delete a particular episode or showing, it will not be recorded automatically again for 28 days. This prevents Now Playing from filling up with shows you probably don't want. If you want to record duplicates, go to Recording Options, Show Type, and select "All (with duplicates)."
- **Parental Controls.** If Parental Controls are on when you schedule a repeating recording, the Recorder checks its current program information to see if any upcoming program violates a Parental Control. If a program does, the Recorder requires the current password to continue. TiVo Plus service is not required to use Parental Controls. (For more information, see page 53.)
- **Keep at Most.** By default, five episodes of a repeating recording program are kept in Now Playing. (To learn how to change this setting, see page 75.)
- **Resolving conflicts.** The TiVo Plus service resolves scheduling conflicts between repeating recordings by comparing recording priorities. If a conflict occurs when you're setting up a new repeating recording, you'll be shown which programs are involved. You'll also be given options to resolve the conflict:
 - Record only those programs that do not conflict with others previously scheduled to record. This gives the repeating recording the lowest priority.
 - Record all programs requested. This gives the repeating recording the highest priority.

You can change recording priorities with the Season Pass Manager. (For more information, see page 77.)

► Recording Options

Recording Options give you more control over your scheduled recordings to make sure you get exactly what you want. With TiVo Plus, the Program Information screen that appears when you select a program includes choices to “Record this episode” or “Get a Season Pass.” When one of these is highlighted, “Options” appears to its right. To see Recording Options, use RIGHT arrow to highlight “Options,” then press SELECT.

To set Recording Options:

1. On the Recording Options screen, use the UP or DOWN arrow to highlight an option, then use the RIGHT and LEFT arrows to change the setting.
2. When you are done, press SELECT or highlight “Record with these options.”
3. Press SELECT again to schedule the recording with the new options.

To cancel your changes, press LEFT arrow, or highlight “Don’t change recording options” and press SELECT.

Recording Options include:

Record Quality. Available for all recordings. With TiVo Plus, you can set a different recording quality each time you schedule a recording. The choices are Basic (EP), Medium (LP), High (SP), and Extreme (Fine), and the default setting is High (SP). (Extreme looks great, but takes up more space.) See page 63 for details.

Keep At Most. Available only for repeating recordings. This option sets the maximum number of episodes to be saved—useful for keeping only the most recent nightly news or only a few of your kids’ daily programs. The default setting is 5.

Show Type. Available only for repeating recordings. The choices are “Repeats & first run,” “First run only,” which records only new episodes, and “All (with duplicates).”



Recording Options: one-time recording



Recording Options: repeating recording

 All (with duplicates) is a good choice for programs with generic or inconsistent program information in the program guide.



Choosing “All (with duplicates)” means that duplicate programs are recorded even if they air within 28 days of each other. (See page 74 for more information.)

Keep Until. Available only for repeating recordings. You can change this setting from “Space needed” (the default setting) to “Until I delete.”

Keep At Least. Available only for individual recordings. You can set the minimum amount of time to keep a recording. The default setting is “Until space needed.”

Programs sometimes start before they’re supposed to, and often end later than scheduled. Using the **Overtime Scheduler**, you can add extra time to your recordings to account for these variations. The Overtime Scheduler consists of these two options:

Start Recording. Available for all recordings. You can choose to start recording up to ten minutes before a program begins. The default setting is “On-time.” (This option is not available once recording starts.)

Stop Recording. Available for all recordings. You can set a recording to stop a few minutes—or up to three hours—after the program is scheduled to end. This lets you extend a recording of a sports event so you can be sure to catch the whole game, even if it goes into overtime. The default setting is “On-time.”

► Get a Season Pass

To get a Season Pass, select a program title from a list (for example, from the TiVo Live Guide, Search by Title, or View Upcoming) to see a Program Information screen. You can choose to get a Season Pass from there. On the To Do List and in Now Playing, episodes of a Season Pass or manual repeat recording are marked with two checkmarks ().

► **Season Pass Manager**

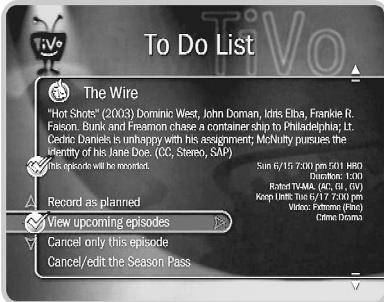
Use the Season Pass Manager to create rules for how you want the TiVo service to prioritize your repeating recordings. For example, say you have a Season Pass to *ER* and a Season Pass to *Dateline*. What if *ER* happens to air at the same time as *Dateline*? The Recorder checks priorities in the Season Pass Manager to decide which program to record. If the *ER* Season Pass has a higher priority, then *ER* is recorded and *Dateline* is not.

If you don't change priorities in the Season Pass Manager, repeating recordings are usually prioritized by the order in which they were set up: the first has highest priority, and so on. If a conflict arises when you try to schedule a repeating recording and you choose to schedule all of its episodes, that repeating recording gets the highest priority.

To change the priority order:

1. Press the TiVo button to go to TiVo Central.
2. Press the DOWN arrow to highlight Pick Programs to Record, and then press SELECT. The Pick Programs to Record screen appears.
3. Highlight "Season Pass Manager," and then press SELECT. The Season Pass Manager screen appears.
4. Use the UP/DOWN arrows to highlight one of your repeating recordings.
5. Press RIGHT arrow to highlight the arrows to the right of the title.
6. Use the UP/DOWN arrows to move the selected title up or down in the list.





► Improved To Do List

With TiVo Plus, the To Do List still has Recording History and lists all scheduled recordings in one place. However, you can now also use it to change Recording Options (even for individual episodes of a repeating recording), and you can use "View upcoming" to look for alternate showings of programs you can't record because of scheduling conflicts. Individual recordings on the To Do List now have a checkmark (✓) to the left of the program title. Season Pass and manual repeat recordings have a double checkmark (✗), and auto-recording WishList searches have a star (★). Any Season Pass with no upcoming episodes appears at the bottom of the list.

Select a program on the To Do List if you want to:

- Change recording options.** Highlight "Record as planned," then press RIGHT arrow and select "Options" to see the Recording Options screen. Changing Recording Options from the To Do List only makes changes for a single episode. Select "Cancel/edit the Season Pass" to make changes for all episodes.
- View upcoming episodes/showings.** Displays a list of upcoming episodes/showings (up to two weeks into the future) of a selected program. Programs scheduled to record have a checkmark, double checkmark, or star. A comprehensive list appears, including episodes with showings on different channels and different time slots. The Program Information screen also includes an option for recording a particular program.
- Cancel this recording or Cancel only this episode/showing.** Cancel a single recording or a single episode from a Season Pass.
- Cancel/edit the Season Pass/manual repeat recording.** Cancel the Season Pass or manual repeat recording, view upcoming programs, or change recording options.

► Finding Your Favorite Programs

The TiVo Plus service provides many ways to quickly search large numbers of TV programs, find your favorites, and schedule recordings.

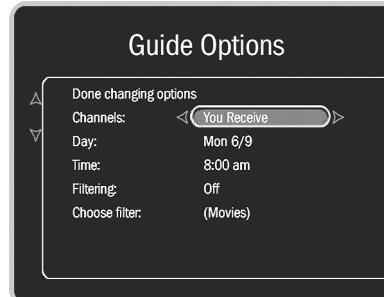
The following options are very useful if you already know what program you want to record. You can also use any of them to just browse through TV listings for interesting programs: Use Guide Options to filter the TiVo Live Guide, Search by Title, Browse by Time, Browse by Channel.

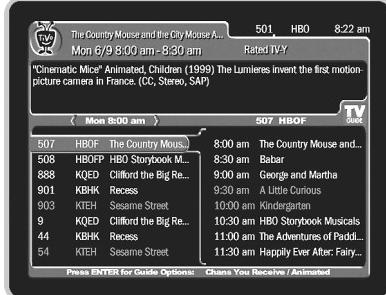
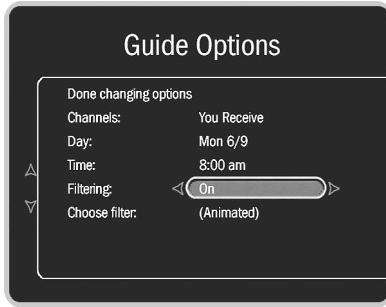
► Using Guide Options

With TiVo Plus, the TiVo Live Guide shows you current and upcoming programs airing up to two weeks into the future (instead of the three days you get with TiVo Basic). You can also quickly set up recordings, rate any program with a Thumbs Up or Thumbs Down, and customize the channels and types of programs shown in the guide. Plus, the TiVo Live Guide is a transparent screen, so you won't miss anything while you browse.

Customize the TiVo Live Guide: Your Recorder uses channel lists to decide which channels the TiVo Live Guide displays. With TiVo Plus, Guide Options are also available that let you quickly change which programs and channels the guide shows. To see Guide Options, press GUIDE to display the TiVo Live Guide, then press INFO (or ENTER). The available options are Channels, Day, Time, Filtering, and Choose filter.

- Channels.** Choosing a list here selects the channels displayed by the TiVo Live Guide. Also, the CHAN UP/DOWN button skips to channels that are on the chosen list. (For details on how to customize these channel lists, see page 51.) The channel lists are:
- **All.** This list displays all of your cable or satellite provider's channels, even channels you don't subscribe to.





- **[Channels] You Receive.** This is the default list. It displays only the channels you have chosen in the Channels You Receive list.
- **Favorites.** The Favorites list is for channels you watch frequently. Use this list to save time when browsing the TiVo Live Guide. Include only a few channels in this list, so that you can quickly look at what's coming up on them.

Day and Time. Sets the guide to show what's on at a particular day and time.

Filtering. Turns filtering on or off. (Choosing a filter is explained below.) When you want to see all channels and programs in the guide, turn filtering off.

Choose filter. The TiVo Live Guide can find specific kinds of shows for you. Highlight “Choose Filter,” and then press SELECT. A list of categories appears. Use the UP and DOWN arrows to highlight a category, and then press SELECT. Choose a subcategory, and then press SELECT. The Guide Options screen appears again and “Filtering” should now be “On.” In the TiVo Live Guide, only channels with programs in that subcategory will appear.

To change a Guide Option: Highlight the option, and then press LEFT or RIGHT arrow to change the selection displayed. Save your changes by selecting “Done changing options,” or pressing GUIDE. To cancel your changes, press CLEAR.

Looking Ahead in the TiVo Live Guide: While you're in the left side of the TiVo Live Guide, press the FWD (▶▶) button to move the displayed time 30 minutes ahead. Try it. To go back in time, press the BACK (◀◀) button.

► **Search by Title**

Search by Title, located in Pick Programs to Record, finds programs, even if you just know the first part of the title.

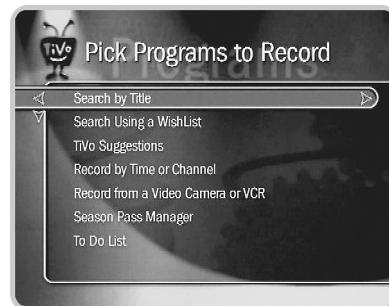
To find a specific program:

1. Highlight “Search by Title,” and then press SELECT.
2. The screens that follow let you limit your search by category and then subcategory.
3. The next screen has a grid of numbers and letters. Notice the white box around the letter *A*. Spell out the title by using the arrow buttons to move the box among the letters, pressing SELECT to enter a highlighted letter. As you select letters, an alphabetical list of programs appears on the right side of the screen. Keep selecting letters until you see your program in the list on the right.

The list alphabetizes without “A(n)” or “The.” If you make a mistake entering text, select DEL (on the screen) or press the BACK (◀◀) button to erase one letter at a time. To clear all text, use CLR (on the screen) or press CLEAR on the remote control. To insert a space, select SP (on the screen) or press FWD on the remote control.

4. When you see your program, press RIGHT arrow until you move the highlight off the grid of letters and into the list on the right side of the screen. Highlight your program and press SELECT to see a Program Information screen.
5. On the Program Information screen, you can choose to view upcoming episodes, get a Season Pass, or record an individual showing.

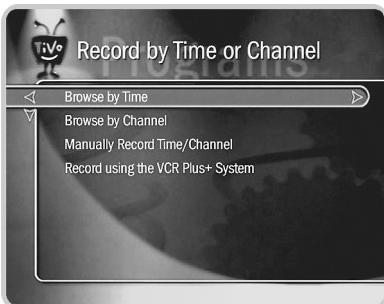
To browse a category of upcoming programs: Choose a category and subcategory. Numbers come before letters, so to start from the top, enter a zero (0).



6

Search by Title only uses programs available on channels selected in the Channels You Receive list. To set up a customized channel list, see page 51.

To find a program that has not yet appeared in the program guide data, use a Title WishList (page 86) instead.



► **Browse by Time**

Browse by Time lets you browse all programs on a particular day and time. With Browse by Time, you can filter the list to see only programs in a particular category. For example, you can browse all the movies airing on Saturday night.

To browse by time:

1. Use the arrow buttons to highlight a category (for example, “Movies”) to narrow the list of programs, then press SELECT.
2. Use the arrow buttons to highlight a subcategory (for example, “Comedy”) to narrow the list of programs, then press SELECT.
3. Press the UP and DOWN arrows to select the date you want to see, then press RIGHT arrow to move the highlight to the time column.
4. Press the UP and DOWN arrows to select a time.
5. Press SELECT to bring up the list of programs without leaving the time selector, or press RIGHT arrow to bring up the list of programs and move to the list at the same time.
6. When you find a program you want to record, highlight it, and press SELECT to bring up the Program Information screen. Then you can view upcoming episodes, get a Season Pass, or record an individual showing.

► **Browse by Channel**

Browse by Channel lets you browse through programs on a particular channel. You can start with all channels or just your favorites.

To browse by channel:

1. Highlight and select either “All Channels,” which includes all the channels you receive, or “Favorite Channels,” which includes just the channels you have selected as your favorites. (For information on customizing these channel lists, see page 51.)
2. Press the UP and DOWN arrows to select the date you want to browse, then press RIGHT arrow to move the highlight to the channel column.
3. Press the UP and DOWN arrows to select a channel. (You can also use the number buttons on the remote control to type in a channel, then press ENTER.)
4. Press SELECT to bring up the list of programs without leaving the channel selector, or press RIGHT arrow to bring up the list of programs and move to the list at the same time.
5. When you find a program you want to record, highlight it, and press SELECT to bring up the Program Information screen. Then you can view upcoming episodes, get a Season Pass, or record an individual showing.





► Finding Programs That Match Your Interests

If you know what you like, WishList searches are great! They allow you to find and automatically record shows that match your interests, tastes, passions, and whims. You can search for future programs with your favorite actor or director by creating an Actor or Director WishList. You can also create a Category Only WishList to find programs tailored to particular categories. The Keyword WishList and the Title WishList allow you to search for specific words or phrases in program descriptions and titles.

► Try a WishList!

You can use WishList searches to find upcoming programs that may interest you and then automatically record them, if you want. It keeps on searching automatically for as long as you keep the WishList.

For example, you could create a Category Only WishList for the category “Movies” and subcategory “Comedy.” You could then use it occasionally to look at a list of all comedy movies airing in the next two weeks. The list would be constantly updated by your Recorder’s connections to the TiVo service for more program information.

You could search for something more specific by creating an Actor WishList for Sean Connery, and then include the category “Movies,” and subcategory “Action.” This WishList would only find action movies starring Sean Connery.

With a Keyword WishList, you can look for something very specific. For example, the Keyword WishList *GIANTS* with category “Football” would find Giants football (but not baseball) games for you.

Here’s another example. You could make a Keyword WishList to find the 1986 remake of the science fiction classic *The Fly*, starring Geena Davis. Not only does this WishList find

 **Search Using a WishList only looks at programs available on channels selected in the Channels You Receive list.**
To set up a customized channel list, see page 51.

a specific program—it finds the specific version! The keyword entry would look like this: “*GEENA DAVIS*” *FLY*. (Using quotation marks in a Keyword WishList makes sure that the WishList only finds programs that match the exact phrase you have entered. This means that you will find *The Fly*, starring Geena Davis and not a documentary about flies narrated by Davis Geena!). You could also find this movie by making a Keyword WishList for the movie’s title and year. In that case, the keyword entry might look like this: “*THE FLY*” *1986*.

After you make a WishList, you can periodically view what it finds by selecting “View all upcoming WishList programs,” or selecting an individual WishList, then selecting “View upcoming programs.” Then you can schedule recordings for just the programs or episodes you want.

► Can a WishList Do More Than Search?

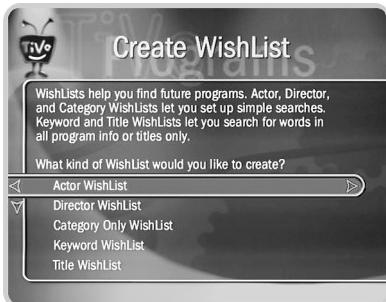
You can set a WishList to auto-record, and it will record every program the WishList finds. For example, with the Sean Connery Actor WishList, you could automatically record Sean Connery action movies.

Some WishList searches are better suited to browsing than to auto-recording. For example, you could create a Category Only WishList for the category “Documentary.” This WishList would find every upcoming documentary. You could then occasionally browse the WishList and choose the upcoming documentaries you want to record.

The more specific a WishList is, the better suited it is to auto-recording. For example, an auto-recording Keyword WishList with the keywords *LAKERS* and *KINGS*, and category “Sports/Basketball” would only record basketball games with both of these teams—a great way to ensure that you enjoy this season’s rivalry. (For more on auto-recording WishList searches, see page 89.)



If you set up an auto-recording WishList for sports, consider using the Overtime Scheduler (described on page 76) to make sure you don't miss the most exciting part of the game!



► Creating a WishList Search

From Search Using a WishList, select “Create new WishList.” Next, select the type of WishList: Actor, Director, Category Only, Keyword, or Title. For most WishList searches, you use the grid of numbers and letters on the next screen to spell out what you’re looking for.

As the last step, you’ll then be able to select a category and subcategory to narrow your search. For example, if you want movies with Harrison Ford, but not documentaries or talk shows, select “Movies.” To search every category, select “Don’t specify a category.”

Category Only WishList: Use the UP and DOWN buttons to highlight a category, then press SELECT or RIGHT arrow. A subcategory list appears. Highlight a subcategory, then press SELECT or RIGHT arrow. To search all subcategories, you can also select “Don’t specify a subcategory.”

Actor or Director WishList: Spell the person’s last name first by using the arrow keys to move the selection box around the grid and pressing SELECT to enter a highlighted letter. As you select letters, a list of names appears on the right side of the screen.

If you see the person’s name, press RIGHT arrow until you move the highlight to a name in the list. Use the UP or DOWN arrow to highlight the name you want and press SELECT.

To search for a name that is not on the list, enter the name in the format: *LAST NAME, FIRST NAME*. You must match the spelling of the name exactly, and you must use a comma (available in the grid under the letter *W*).

Keyword or Title WishList: You can create a Keyword or Title WishList with one keyword or with several. For a Keyword WishList, the TiVo service checks for your

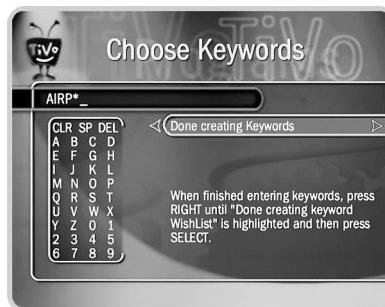
keywords in the program or episode title, description, actor, director, year, and category information. A Title WishList works very similarly, but the TiVo service only searches program and episode titles. Use a Title WishList (as compared to Search by Title on page 81) to find a program that has not yet appeared in the program guide data.

Spell your keyword(s) by using the arrow buttons to move around, then press SELECT to enter highlighted letters on the grid. You can enter as many characters as will fit on the screen. When you have finished, use RIGHT arrow to highlight “Done creating keywords,” then press SELECT or RIGHT arrow.

Using * in WishList Searches: To search for similar words in a Keyword or Title WishList, use the asterisk (*) as a special symbol that replaces the endings of words. For example, the keyword *AIRP** would find shows containing “airport,” “airplane,” “airplanes,” as well as the movie “Airplane!” To enter an asterisk, press the SLOW (▶) button as you are spelling out your keyword or title.

The asterisk can be helpful when you’re looking for a range of similar words, as in the example above, or if you’re just not sure how something is spelled. Pop quiz: is it “irresistable” or “irresistible?” Use the keyword *IRRESIST** and don’t worry about it! Two things to note about using the asterisk:

- It can only be used at the end of a keyword; it cannot be used to omit letters at the beginning or in the middle of a word. (For example, *AIR*NE* or **PLANE* would not work.)
- When using this symbol, be as specific as possible. For example, do not use keywords like *TH**. There will not be enough room to show all the results of a keyword that is too general. In addition, large WishList searches can also affect system performance.





If you like music performances, try a keyword WishList for “Concert.”

Choose the category “Arts” and the Sub-Category “Music.”

► **Tips for Entering Keywords**

- To specify an exact phrase in a Keyword or Title WishList, surround a set of words with quotation marks. To enter quotation marks, press the PAUSE (||) button. For example, the keyword *PAUL SIMON* might also turn up a documentary about Simon Bolivar with a director whose name is Paul. Use “*PAUL SIMON*” to be certain you find programs that only feature Paul Simon.
- If you enter more than one keyword in a Keyword or Title WishList, they only find programs that match all of your keywords (for example, “*GEENA DAVIS FLY*”).
- If you want to include an exact phrase and additional keywords, there should be a space between the final quotation mark and the beginning of the next word. You can place a space character by selecting SP on the grid of letters.
- Replace hyphens (-), slashes (/) and periods (.) with spaces. For example, you would use the keyword phrase *20 20* to search for the title “20/20.” For an Actor WishList for Catherine Zeta-Jones, use *ZETA JONES, CATHERINE*. You can place a space character by selecting SP on the grid of letters or by pressing the FWD (▶▶) button.
- Any other marks, such as apostrophes (') and ampersands (&), are ignored. For example, you would use the keyword phrase *6 OCLOCK NEWS* to search for the title “6 O’Clock News.” (Note that commas (,) are also ignored, except in an Actor or Director WishList, where they are essential.)
- For dollar signs (\$), substitute the letter S. For example, to find “\$100,000 Pyramid,” use *S100000*. (In Search by Title, skip the dollar signs to find these titles.)

► **Browsing, Recording, and Editing a WishList**

Browsing all WishList searches. Select “View all upcoming WishList programs” to see a list of up to 10 upcoming shows for each of your WishList searches (up to 200 programs total). The list is divided to show programs found by each WishList. To record a program, select its title to see the Program Information screen then select “Record this episode.”

Browsing an individual WishList. Select the WishList you want to browse, then select “View upcoming programs” to see a list of up to 200 unique upcoming programs that match the WishList. To record a program, select its title to see the Program Information screen, then select “Record this episode.”

For a comprehensive list of all upcoming showings of a program, including repeats (multiple showings of the same program), select the title of the program in the “Upcoming Programs” list. On the Program Information screen that appears, select “View Upcoming Episodes>Showings.”

Auto-recording WishList. When you create a WishList or select it, you can choose the action, “Auto-record WishList programs.” This means every program the WishList finds will be automatically recorded.

Each auto-recording WishList and its upcoming recordings are marked with a star (★). If you want to be sure that all the matches your auto-recording WishList finds are recorded, give the auto-recording WishList a high priority in the Season Pass Manager. (See page 77 for details.)

Editing a WishList. You can change a WishList—for example, to correct a misspelling, or to add a category or subcategory to narrow the results. Just select the WishList, then select “Edit WishList.”



As you browse the upcoming program titles found by WishList searches, remember that the CHAN UP/DOWN button pages quickly through lists.

6



►► Finding New Programs

The TiVo Plus service provides special features that help you sift through upcoming programs to find shows you'd like:

Showcases

Showcases lists the best programs offered by television's biggest networks. Go to TiVo Central, then select Showcases. (See page 18.)

TiVolution Magazine

A guide to the best upcoming shows on television. Go to TiVo Central, then select Showcases, then TiVolution Magazine. (See page 18.)

TiVo Suggestions

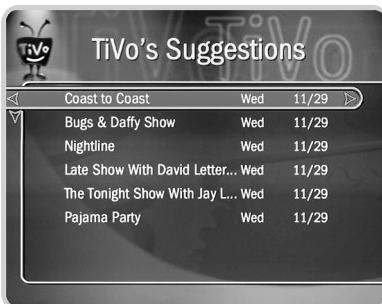
These show up in the Now Playing list, if they're recorded.

TiVo Suggestions

TiVo Suggestions is a personalized list of shows selected to match your preferences. How is this magic possible? Any time you watch programs, live or pre-recorded, or browse programs with the TiVo Live Guide, in Showcases, or in TiVolution Magazine, you can rate them by pressing the THUMBS UP and THUMBS DOWN buttons ( ). You can give a program up to three Thumbs Up or three Thumbs Down. Also, any time you choose to record a program, it automatically gets one Thumbs Up.

Over time, the more shows you rate, the better TiVo Suggestions will be at finding programs you like. The suggestions are listed under TiVo Suggestions in order of how closely they match your preferences.

Suggested programs based on your ratings appear in TiVo Suggestions. Go to TiVo Central and select Pick Programs to Record, then TiVo Suggestions. (If you don't see



 Your personal TV preferences are just that: personal. All that information is stored in the Recorder, in your living room. For more information on the TiVo Privacy Policy, see Chapter 10 or visit www.tivo.com/privacy.

programs yet, come back later—it may take a few hours the first time.) The list of programs is ranked, so shows you are more likely to enjoy are near the top. If you want to record a program, select it and the Program Information screen appears.

Auto-Recording TiVo Suggestions. As an added bonus, when the Recorder has available space, it automatically records TiVo Suggestions,. You will find recorded TiVo Suggestions on Now Playing, listed below programs you requested. Or, if you have the Groups option turned on (see page 92), TiVo Suggestions recordings will appear in their own group.

It's important to remember these characteristics of TiVo Suggestions recordings:

- TiVo Suggestions never replace shows you request, or prevent your requested shows from being recorded.
- TiVo Suggestions are always the first programs deleted to make room for recordings you request.

Auto-recording TiVo Suggestions is an easy way to find programs that you never knew about, or old favorites you may have forgotten. You can turn auto-recording of TiVo Suggestions on and off. Just go to TiVo Central, then select messages & Setup, then Settings, then Recording, then TiVo Suggestions.



If other members of your household are pressing THUMBS UP on shows you don't care for, and vice versa, you may find that TiVo Suggestions is making some suggestions that you like, and some that are more appropriate for other members of your household.



The TiVo icon to the left of the program title indicates that it was recorded as a TiVo Suggestion.



A note at the bottom of Now Playing tells you which sorting option you are using and whether groups are on.



► Grouping & Sorting Programs in Now Playing

With TiVo Plus, you can sort and group programs in Now Playing.

► Sorting Programs

Choose how you want the programs in Now Playing to be listed:

- **Alphabetically.** Programs are listed alphabetically by title (from A to Z).
- **By date recorded.** Programs are listed by the date they were recorded, with the most recent at the top and the oldest at the bottom.

► Grouping Programs

The Groups option lets you group like programs together to “tidy up” the screen. When you turn on Groups, a folder appears in Now Playing for:

- Each television series with more than one recorded episode;
- Each auto-recording WishList with a recorded program;
- TiVo Suggestions (if you have auto-recording of TiVo Suggestions turned on).

A program may fit in any or all of these categories, so it may appear in more than one group, even though only one copy of the program is actually recorded. If you delete a program from one folder, it will disappear from all folders. A number in parentheses to the right of each group shows how many programs it contains.

► To Use Sorting and Grouping

When you are in Now Playing, press ENTER on your TiVo remote to see Now Playing Options. You can also Press 1 on your remote control to change the sort order of Now Playing programs; or press 2 to turn groups on or off.

► Copying Programs to a VCR

If you have a VCR, you can copy* a program from Now Playing to a videotape. Copies to a VCR happen in real time. For example, if a program is two hours long, it will take two hours to save it. You will not be able to watch live TV or recordings while copying.

Most of the buttons on your remote that control live TV work as usual during Copy to VCR—you can fast forward through the boring parts! The VCR will record the video exactly as it appears, including the status bar, channel banner, and any icons on the screen.

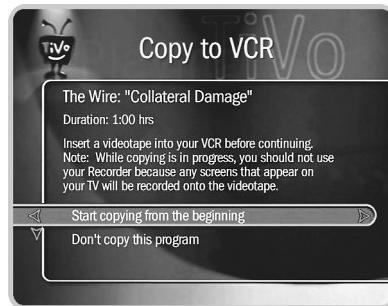
Using Copy to VCR:

1. Be sure your Recorder is connected to your VCR (see your *Start Here* booklet and *Installation Guide* for details), and the VCR is set to record input from your Recorder. (See your VCR's instructions for how to set its input.)
2. Insert a videotape into your VCR.
3. Go to Now Playing, highlight the show you want to save, then press SELECT.
4. Highlight "Copy to DVD or VCR," press SELECT, then select "Copy to VCR."
5. Select "Start copying from the beginning."
6. A title screen appears for ten seconds. When you see it, press your VCR's record button. When the program is over, press stop on your VCR.



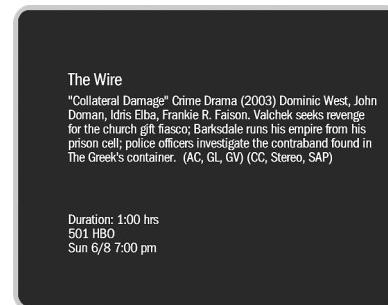
You can cancel Copy to VCR by pressing the LIVE TV or TiVo button on your remote. A videotape icon appears as a warning. Press the same button again and a confirmation screen appears giving you the option to resume copying at a later time, or cancel copying to VCR. If you choose to cancel copying, be sure to press stop on your VCR as well.

* Some content may not be copied due to copy protection rights over the material. For more details, See "Copy Protected Material" on page 35.



6

The VCR will also record the channel banner, status bar, and any icons that may appear on the screen if you press buttons on the remote control.



CHAPTER 7

Home Media Option

Using Home Media Option™	96
Remote Scheduling	97
Digital Music & Photos	98
Multi-Room Viewing	100

►► Using Home Media Option™

The TiVo Home Media Option premium feature package is available for purchase to TiVo Plus subscribers. (Home Media Option features will work with TiVo Plus service but not with TiVo Basic service.) Home Media Option gives you brand-new ways to use your Pioneer DVD Recorder with TiVo. Designed to bring you the best in networked home entertainment, Home Media Option includes the following features:

- Remote Scheduling — Schedule recordings of shows anytime and anywhere you have Internet access and a standard web browser!
- Digital Music Player — Use the home entertainment center in your living room to listen to playlists and MP3 files that are stored on a computer.
- Digital Photo Viewer — View slideshows of digital photos stored on your computer from the comfort of your couch.
- Multi-Room Viewing — Record programs in the living room and watch them in the bedroom, or vice versa.

The following pages give you some basic information about each feature, including a brief introduction to the feature and a short description of how it works. Much more detailed information about all of the features of the Home Media Option is available online at www.tivo.com/tryit.

► Purchasing Home Media Option

To purchase Home Media Option, visit Manage My Account at www.tivo.com/manage. At Manage My Account, you can upgrade to TiVo Plus service for your Recorder, purchase Home Media Option, and keep your TiVo service account, billing, and contact information up-to-date.



The Home Media Option Premium Features Guide contains complete information on purchasing, setting up, and using Home Media Option. You can find this guide online at www.tivo.com/media.

► Remote Scheduling

With Remote Scheduling, you can schedule recordings on your Recorder from any computer that has Internet access and a standard web browser. Just go to TiVo Central Online (www.tivo.com/tco), sign in, and search for a show by time, title, keyword, category, or actor/director.

Once you've found a show, you can choose to record a single episode or get a Season Pass, complete with all the recording options you're used to on your Recorder. You can even set the program not to record if it conflicts with a recording that your Recorder already has scheduled. The next time your Recorder connects to the TiVo service, it checks TiVo Central Online and schedules your request.

► To Use Remote Scheduling

1. Go to TiVo Central Online at www.tivo.com/tco and sign in.
2. On the TiVo Central Online Welcome page, select the name of the Recorder for which you want to schedule recordings.
3. Browse program information using a simple or advanced search of TV listings, or browse by channel.
4. From the search results, click the name of a program, then choose to record either a single program, or (if you have selected a series) an entire season.
5. You have the option to receive a confirmation e-mail sent to the e-mail address you provide.



Using Remote Scheduling doesn't require any changes to your current setup. However, if your Recorder is connected to a home network that includes an always-on Internet connection, it will check the TiVo service for your recording requests much more often. With an always-on connection, you can schedule a recording within an hour of the program's air-time from any place that you have access to the Internet!

► Digital Music & Photos

The digital music and digital photos features of Home Media Option let you use your Recorder to play MP3 music files and playlists and view photos that are stored on a computer. Now you can enjoy your digital music collection on the best sound system in the house, or watch slideshows of digital photos in the comfort of your living room.

To use the Digital Music Player or Digital Photo Viewer, you need:

- a Recorder with Home Media Option and a subscription to TiVo Plus
- a computer connected to the Recorder via a home network, as described in Chapter 8, “Connecting to a Home Network”
- the TiVo Desktop application that makes music and photos on the computer available to a Recorder

► TiVo Desktop

TiVo Desktop is a small, easy-to-use program for your computer that you can download from www.tivo.com/desktop. TiVo Desktop is available for the following operating systems:

- Windows 98, ME, 2000, XP
- Macintosh OS X v10.2 or later

File Types. The TiVo Desktop application works with music in the MP3 format, and with playlists in the following formats used by common music players: M3U, PLS, ASX, and B4S. TiVo Desktop works with digital photos in these formats: BMP, DIB, GIF, JPG, PNG.

► Playing Your Music and Viewing Your Photos

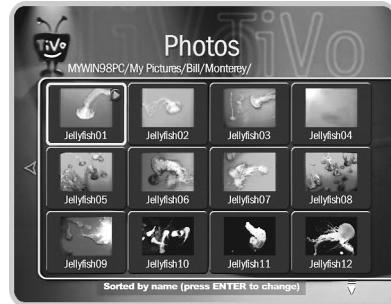
Using the digital music and digital photos features of Home Media Option is easy. After you purchase Home Media Option, a Music & Photos selection appears on TiVo Central.

To listen to music on the Recorder:

1. On your computer, use the TiVo Desktop application to “publish” music that you want to access through your Recorder. (Publishing is a process that makes digital music and photos available to your Recorder. It is usually as simple as selecting music and clicking a Publish button.)
2. On your Recorder, go to TiVo Central and select Music & Photos, then select the music option for your computer.
3. You should see a list of music you published with TiVo Desktop. Select the music you want to listen to and press the PLAY (►) button. In a few seconds, the music plays.

To view photos on the Recorder:

1. On your computer, use the TiVo Desktop application to “publish” photos that you want to access through your Recorder. (Publishing is a process that makes digital music and photos available to your Recorder. It is usually as simple as selecting photos and clicking a Publish button.)
2. On your Recorder, go to TiVo Central and select Music & Photos, then select the photos option for your computer.
3. You should see a list of the photos you published with TiVo Desktop. Select the photos you want to view and press the PLAY (►) button. In a few seconds, the photos start to appear on your television screen.





► Multi-Room Viewing

Multi-Room Viewing lets you transfer programs between your Pioneer DVD Recorder with TiVo and a second Recorder, or another model of TiVo Series2 Digital Video Recorder (DVR). To use Multi-Room Viewing:

- Each Recorder (or Series2 DVR) must have an active TiVo service subscription. (Home Media Option features will work with TiVo Plus service, but not with TiVo Basic service.)
- The Recorders must be on the same TiVo service account. (The TiVo service subscription for each Recorder must be owned by the same person.)
- The Recorders must be connected to the same home network. For more information, see Chapter 8, “Connecting to a Home Network.”
- Home Media Option must be purchased separately for each Recorder.

After you have connected the Recorders to your home network, the Now Playing list of each Recorder will show the names of the others. Programs transferred to your Recorder cannot be copied to DVD.

► How to Transfer a Program

To transfer a program from one Recorder to another within your home:

1. In Now Playing on the receiving Recorder, select the Recorder containing the program you want to transfer.
2. Press SELECT on the name of a program you want to transfer. (You cannot transfer a program while it is still recording.) Then select “Watch on this TV.”

On the Getting Program screen, you can choose to watch the program as it is transferring. If you do, you might experience intermittent delays in the transfer.

CHAPTER 8

Connecting to a Home Network

Introduction	102
Home Networks	103
Making a Wireless Connection	105
Making a Wired (Ethernet) Connection	107
Completing the Recorder's Network Settings	108



If you do not already have a home network and you want to learn how to create one, Linksys — a leading manufacturer of wireless and always-on Internet connection networking equipment — provides valuable information on its web site at: www.linksys.com/support/.

Other online resources also describe the steps and types of equipment used to set up a home network. You can try going to a popular search engine like Google (www.google.com) or Yahoo (www.yahoo.com) and typing the phrase, “setting up a home network” in the search field. You will obtain a number of search results (links) that will help you set up your home network.

►► Introduction

This chapter shows you how to connect your Recorder to a home network. You should do this if:

- You want to use the Music and Photos and/or Multi-Room Viewing features of Home Media Option. See Chapter 7 for more details.
- You want to eliminate regular use of a phone line. The Recorder can use an always-on broadband Internet connection (for example, DSL or a cable modem) that is part of a home network for the Remote Scheduling feature of Home Media Option, and to connect to the TiVo service. It will still need a phone line during Guided Setup.

In addition, with an always-on broadband connection, you can use Remote Scheduling for any program airing more than an hour after you request it. (If your Recorder is using a phone line, processing a Remote Scheduling request can take up to 36 hours.)

Even if you do not have a home network, you can still connect multiple Recorders to each other to use the Multi-Room Viewing feature of Home Media Option. This setup is described online at www.tivo.com/support.

► Home Networks

When we refer to a “home network,” we mean two or more devices (probably computers), connected to a router. Connecting Recorders to a home network is the best way to take full advantage of Home Media Option.

► USB Port, Wireless and Wired Network Adapters

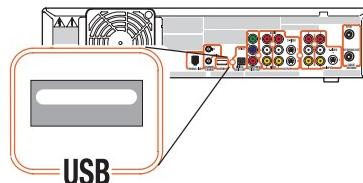
On the back panel of your Recorder, you will see a *USB port* that can be used to connect either a wireless or a wired (Ethernet) USB network adapter.

USB *network adapters* let your Recorder use its USB port to communicate with other networked devices. Whether you choose wireless or wired (Ethernet), you will need a network adapter for each Recorder you wish to connect.

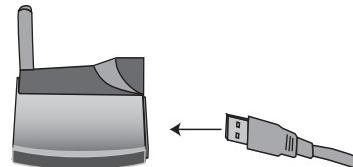
TiVo recommends the following models of wireless and wired (Ethernet) network adapters:

- Wireless: Linksys WUSB11 ver. 2.6 — Instant Wireless USB Network Adapter, Version 2.6 or later. (The version number is located on the front and side panels of the box.)
- Wired (Ethernet): Linksys USB100TX — EtherFast® 10/100 USB Network Adapter.

Our customers have also reported some success with other models. Check TiVo online support at www.tivo.com/adapters for the latest information.



The USB port on the back panel of your Recorder



A USB Wireless network adapter
(yours may look different)



An Ethernet USB network adapter
(yours may look different)

8



You do not need to use the CDs that
came with your network adapters.

They are intended to load software on your
computer. You can put the CDs away for
safe keeping.

Choosing Wireless or Wired (Ethernet)

You can connect your Recorder to your home network using either a wireless or wired (Ethernet) connection. Here are some notes to help you choose which approach you want to use.

- **Wired (Ethernet).** Ethernet connections are generally faster, less expensive, more reliable and less susceptible to interference than wireless networks. Using Multi-Room Viewing to transfer a program is quicker over wired (Ethernet) than it would be over a wireless connection.
- **Wireless.** Connecting your Recorder wirelessly may be more convenient because you do not have to run a cable from your Recorder to another device. However, wireless networks are typically more expensive and slower than Ethernet networks, and may be subject to interference from appliances such as microwaves and 2.4 GHz cordless phones. To connect wirelessly, you must have a wireless access point or wireless router on your home network. On most home networks, the wireless access point is part of an integrated hub/router and home gateway.



If you are connecting two Recorders to a home network to use Multi-Room Viewing, using a wired (Ethernet) connection for one of them will speed up program transfers.

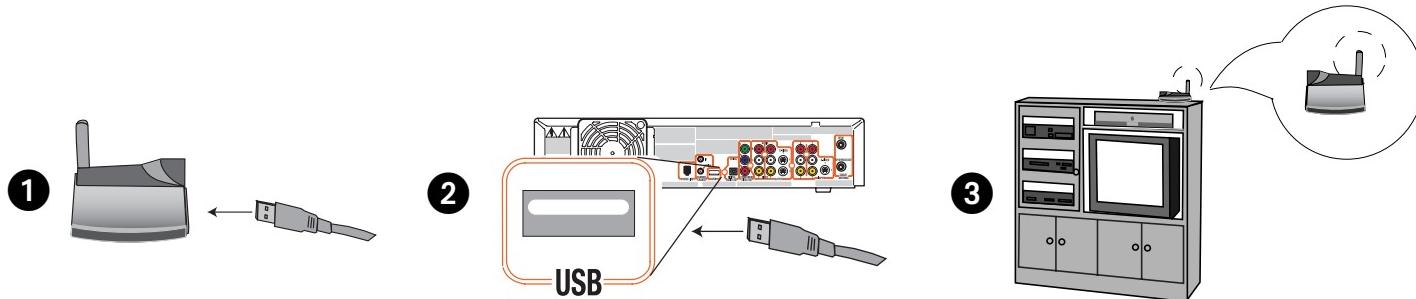
► **Connecting to a Home Network**

- To connect a Recorder to a home network wirelessly, see “Making a Wireless Connection” on page 105.
- To connect a Recorder to a wired (Ethernet) network, see “Making a Wired (Ethernet) Connection” on page 107.

► Making a Wireless Connection

Use this example if you have a home network that includes a wireless access point (WAP) or wireless router.

To connect a wireless network adapter to your Recorder:

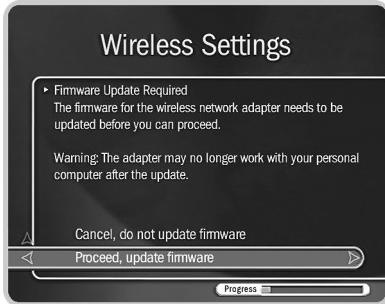


- 1. Connect to the adapter.** If it is not already attached, connect one end of the USB cable that came with your wireless network adapter to the port located on the back of the adapter.
- 2. Connect to the Recorder.** Connect the other end of the USB cable to the USB port on the Recorder. The power light on the wireless adapter may come on before the cable is completely inserted into the USB slot. Make sure you push the cable all the way into the USB slot.
- 3. Position the adapter.** Position the adapter in an open location so that the signal is easily transmitted. For example, if your Recorder is in an entertainment center, you might place the adapter on top of your entertainment center. Do not place the wireless

 **The cable may already be attached to your wireless network adapter.**

8

 **You can leave your Recorder plugged in while you connect a network adapter.**



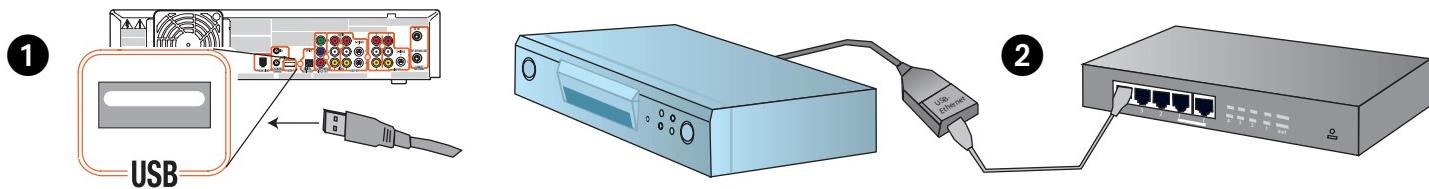
adapter near the Recorder's power supply or on a power strip or surge protector. Doing so can cause signal interference or reduce signal strength.

4. **Firmware update.** When you first connect a wireless network adapter to your Recorder, you may see a screen that says "Firmware Update Required." This means your Recorder has a software update for the wireless network adapter you have connected. Select the option to update. This should not take more than a minute or two. During the update, do not disconnect the network adapter wires or the power to the Recorder. Either action might damage the adapter.
5. **Important message.** The first time you connect a network adapter, you will see an Important Message the next time you press the TiVo button. Review it, then press SELECT on the remote control to go to TiVo Central.
6. **Next Step.** Go to "Completing the Recorder's Network Settings" on page 108.

► Making a Wired (Ethernet) Connection

This example shows how to connect a Recorder to a network hub using a wired (Ethernet) network adapter.

To connect a wired (Ethernet) network adapter to your Recorder and your network hub:

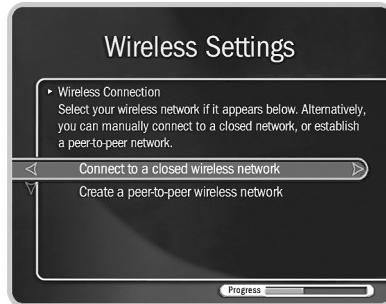
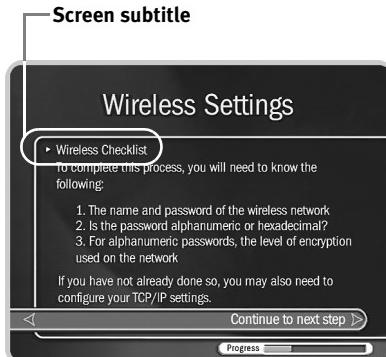


- 1. Connect the adapter to the Recorder.** Connect the USB end of the Ethernet adapter to the USB port on the Recorder.
- 2. Connect the Ethernet cable.** Plug one end of an Ethernet cable into the Ethernet adapter, and plug the other end into your home network's hub or router.
- Important message.** The first time you connect a network adapter, you will see an Important Message the next time you press the TiVo button. Review it, then press SELECT on the remote control to go to TiVo Central.
- Next Step.** If your home network has DHCP, wait for a few minutes for your Recorder to automatically complete its network settings, and then you are done. If your network does not have DHCP, or you are having trouble establishing a network connection, go to "Completing the Recorder's Network Settings" on page 108. (DHCP is described in "Basic TCP/IP Concepts" on page 112.)

 You can leave your Recorder
plugged in while you connect a
network adapter.



Many of the screens you use to complete Wireless Settings or TCP/IP Settings have the same title. However, they have different subtitles. In this document, each screen is identified by its subtitle.



► Completing the Recorder's Network Settings

If your Recorder is connected to a wired (Ethernet) network adapter, skip to “TCP/IP Settings for a Home Network” on page 111.

► Wireless Settings for a Home Network

If you have a wireless home network, and have connected a wireless network adapter to your Recorder, as described on page 105, you are ready to complete Wireless Settings.

To get to Wireless Settings: press the TiVo button on the remote control to go to TiVo Central, then select Messages & Setup, then Settings, then Phone & Network, then “Edit phone or network settings,” then Wireless Settings.

Wireless Checklist

This is the first Wireless Settings screen you will see. It lists information you need to complete wireless settings. You can find all this information in the configuration settings of your network’s wireless access point or router.

If your wireless network does not use encryption (WEP), then you only need to provide a wireless network name; you do not need to provide a password format or password.

When you are ready to continue, press SELECT on your remote control.

Wireless Connection and Wireless Network Name

You must now provide the name of your wireless network. Wireless networks have a network name (sometimes called an SSID for *service set identifier*). A wireless network may be *open* or *closed*. Open wireless networks broadcast their network names, allowing devices in their vicinity to identify them automatically. Closed wireless networks do not broadcast their network names, so they cannot be identified automatically.

This screen lists the names of nearby wireless networks that your Recorder has been able to identify. If you have a wireless router (or wireless access point) and you did not set a network name, your network is probably using a name supplied by the router's manufacturer.

If your network's name is listed, select it. (You may be able see more names by pressing CHAN DOWN to scroll down the screen.)

Otherwise, select "Connect to a closed wireless network":

- On the Wireless Network Name screen, enter the name of your network by using the arrow keys on your remote control to highlight a character, then press SELECT.

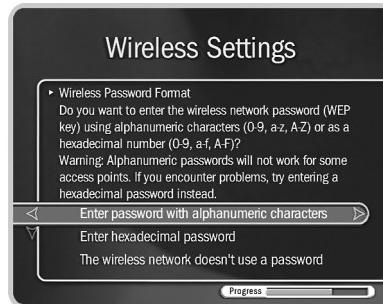
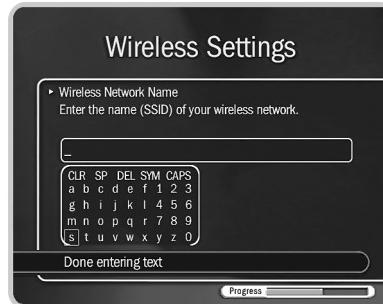
You must use capital and lowercase letters appropriately. For example, to find a network named "My Network" you must capitalize the "M" and "N"; entering "my network" would not work. Use THUMBS UP and THUMBS DOWN to change to uppercase or lowercase. Select "Done entering text" when you are finished.

If the Recorder detects that your wireless network does not use encryption (WEP) you will see the Confirm Settings screen, described on page 111.

Wireless Password Format

You see the Wireless Password Format screen if there is a chance that your wireless network uses *WEP encryption*.

WEP. WEP is a kind of encryption used by wireless networks to improve their security. There are different levels of WEP encryption, typically called 40, 64, 104, 128, or 256-bit encryption. Encryption at higher levels offers better security. At the highest levels (104-bit or above), WEP encryption may slow down the transfer of programs from one Recorder to another by a small amount. WEP is usually turned on or off through the configuration



settings of a wireless access point or router. If your network uses WEP, then it has a password or “key.”

To connect a Recorder to a network that uses encryption, you need to provide:

- **A wireless password format.** WEP passwords may be hexadecimal (a combination of letters from A-F and numbers from 0-9), or alphanumeric (a combination of letters from A-Z and numbers from 0-9). If your network has both an alphanumeric and a hexadecimal password, we strongly recommend you use the hexadecimal password.
- **A wireless password.** It does not matter whether the letters of a hexadecimal password are uppercase or lowercase, but for alphanumeric passwords, capitalization is important. For example, if the password is “MyPassword,” then entering “mypassword” will not work. Some hexadecimal passwords have only numbers.
- **A level of wireless encryption.** If you specify an alphanumeric password, you must also specify a level of wireless encryption. Recorders are compatible with 40, 64, 104, and 128-bit encryption; they are not currently compatible with 256-bit encryption.

Choose a format or select “The wireless network doesn’t use a password.” If you select “The wireless network doesn’t use a password,” you will see the Confirm Settings screen, described on page 111.

Wireless Password — Alphanumeric or Hexadecimal



- **Hexadecimal (preferred).** Enter a hexadecimal password by using the arrow keys on your remote to highlight a character, then press SELECT. It does not matter if a letter is uppercase or lowercase. Some hexadecimal passwords contain only numbers.
- **Alphanumeric.** Enter an alphanumeric password by using the arrow keys on your remote to highlight a character, then press SELECT. You must use capital and

lowercase letters appropriately. For example, if your password is “MyPassword”, entering “mypassword” will not work. Use THUMBS UP and THUMBS DOWN to change to uppercase or lowercase. Select “Done entering text” when you are finished.

Wireless Encryption

If you entered an alphanumeric password, you will see this screen. Select the level of encryption used by your wireless network. If your network uses 104-bit encryption, select 128-bit encryption. Recorders are not currently compatible with 256-bit encryption.

Confirm Settings

Select “Accept these settings” if they are correct. For steps you can take to troubleshoot issues with your wireless connection, see “Questions About Networking” on page 141.

Change Connection Type?

If your network has a shared broadband Internet connection, you can select “Yes” to use it to connect to the TiVo service instead of a phone line.

Next Step

You have completed wireless settings. If your home network has DHCP, and you do not have a DHCP Client ID, you are done. If your home network does not have DHCP or you have a DHCP client ID, continue with “TCP/IP Settings for a Home Network.”

► **TCP/IP Settings for a Home Network**

You are ready to complete TCP/IP settings if:

- You are connecting your Recorder to your home network wirelessly and have already completed “Wireless Settings for a Home Network” on page 108, or
- You have a wired (Ethernet) adapter connecting your Recorder to your home network.



► Basic TCP/IP Concepts

This section describes a few basic TCP/IP concepts. If you are familiar with home networking, you can skip to “Begin TCP/IP Settings” on page 113.

IP Address. TCP/IP settings are used to manage IP addresses on a network. An IP address is a number that identifies a single device on a network (in much the same way that a home address identifies a single home in the US). IP addresses use four numbers separated by periods. Each number can be from 0 to 255. Some example IP addresses are:

192.168.0.1 and 10.8.3.25

 An IP address assigned by DHCP is called a *dynamic IP address* because it may change automatically as devices are added to or removed from the network. An IP address you specify is considered a *static IP address*, because it will not change until you specify a new one.

DHCP and Static IP Addresses. DHCP automatically assigns IP addresses to devices on a network. Most home networks include a router or home gateway that has DHCP. If your network has DHCP, or you are creating a peer-to-peer network, your Recorder can obtain its IP address automatically.

If your network does not have DHCP, you must assign an IP address for your Recorder. If you assign an IP address to your Recorder, remember that:

- The first three sets of numbers in the IP address usually must match the first sets of numbers in the IP address used by another device on the network (for example, a computer). The first three sets of numbers for IP addresses on a home network are usually: ‘192.168.0’ or ‘192.168.1.’
- If the first three sets of numbers match those of another IP address, the last set of numbers has to be unique.

For example, two IP addresses for devices on the same network might be ‘192.168.1.5’ and ‘192.168.1.6’.

► Begin TCP/IP Settings

To get to TCP/IP Settings: press the TiVo button on the remote control to go to TiVo Central, then select Messages & Setup, then Settings, then Phone & Network, then “Edit phone or network settings,” then TCP/IP Settings.

TCP/IP Connection

On the first screen in TCP/IP Settings, you specify how your Recorder gets an IP address. On this screen you can choose to:

- Obtain the IP address automatically. Use this option if your router or gateway has DHCP. Continue with “**DHCP Client ID**,” below.
- Specify a static IP address if you don’t have a DHCP server. Continue with “**Static IP Address Checklist**” on page 114.

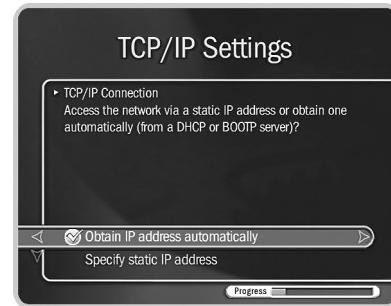
If you are not sure what to select, you can try “Obtain IP address automatically.” This selection will work for most people. If it does not work, you can return to TCP/IP Settings later and make other selections. (A brief description of IP addresses is provided in “Basic TCP/IP Concepts” on page 112.)

DHCP Client ID

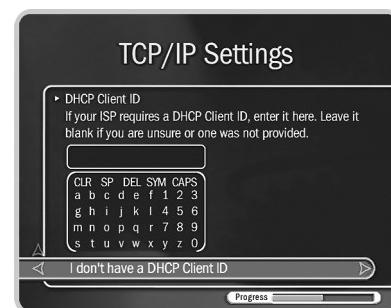
Unless you received a DHCP Client ID from your Internet service provider (ISP), you can select “I don’t have a DHCP Client ID.” This selection will work for most people.

If your ISP provided you with a DHCP Client ID, enter it by using the arrow keys on your remote control to highlight a character, then press SELECT.

You must use capital and lowercase letters appropriately. For example, if your DHCP Client ID is “ID7343”, entering “id7343” will not work. Use THUMBS UP and THUMBS



8



DOWN to change to uppercase or lowercase. Select “Done entering text” when you are finished. Skip to “**Confirm Settings**” on page 116.

Static IP Address Checklist

If you do not have a DHCP server, you need to provide:

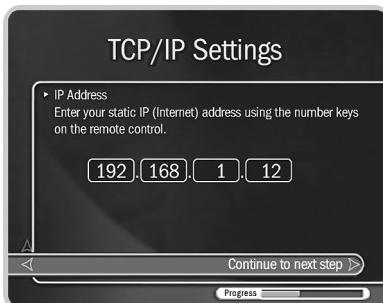
- An IP address for your Recorder,
- A Subnet Mask for your home network,
- An IP address for your home gateway or router, and
- An IP address for a DNS (Name Server).

You will create a unique IP address for your Recorder. The Subnet Mask, gateway or router IP address, and DNS IP address are usually provided by your Internet service provider (ISP). They are also usually available on the configuration screens of your home gateway or router.

If you have a computer on your home network, you may be able find the Subnet Mask, home gateway, or router IP address, and DNS IP address in the computer’s TCP/IP settings. In addition, you can use your computer’s IP address to help create an IP address for your Recorder. For example, if your computer’s IP address is ‘192.168.1.2’ then your Recorder’s IP address should probably also start with ‘192.168.1’ and end with a number other than 2.

IP Address

The first three sets of numbers in the IP address are usually the same as other devices on your home network. The final number is usually unique to a device on your home network. For example, with the IP address ‘192.168.1.12’, the first part, ‘192.168.1’,



would be common to all devices on the network. The last part, '12', would be unique to a device on the network.

Subnet Mask

A subnet mask allows communication between a large network (such as the Internet) and a smaller sub-network (such as your home network). It uses the same format as an IP address and is usually provided by your Internet service provider (ISP). The subnet mask for a home network is usually '255.255.255.0'.

You may also be able to find the subnet mask by inspecting the IP settings of a computer on the same home network.

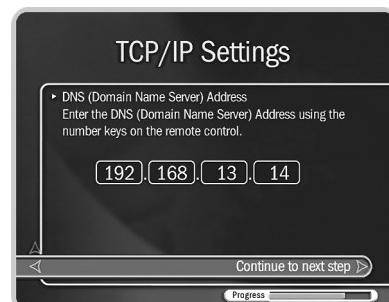
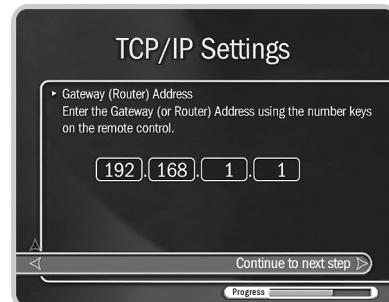
Gateway (Router) Address

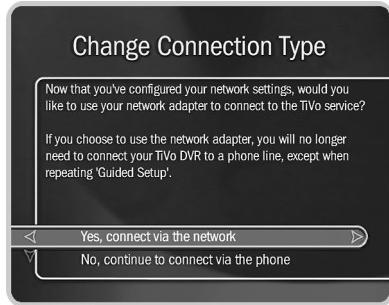
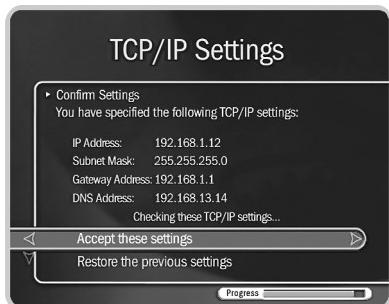
Enter the IP address of your home gateway or router. The IP address is usually available in the configuration screens for your gateway or router. Some common values for the gateway or router IP address on a home network are '192.168.0.1' and '192.168.1.1'. If you use a router supplied by your Internet service provider (ISP), your ISP should also have supplied the router's IP address.

You may also be able to find the home gateway or router IP address by inspecting the IP settings of a computer on the same home network.

DNS (Domain Name Server) Address

If your home network includes a broadband connection to the Internet, your Internet service provider (ISP) will have given you a DNS address. You may also be able to find the DNS address by inspecting the IP settings of a computer on the same home network.





For steps you can take to troubleshoot issues with your connection to the TiVo service, see “Questions About Networking” on page 141.

Confirm Settings

Review the settings and select “Accept these settings” if they are correct.

Congratulations, your Recorder should now be connected to your home network!

For steps you can take to troubleshoot issues with your Network Connections, see “Questions About Networking” on page 141.

Change Connection Type?

If your Recorder connects to the TiVo service over a phone line, you will see this screen anytime you complete Wireless Settings or TCP/IP Settings. Only select “Yes,” if your Recorder is connected to a network that includes an always-on Internet connection.

Advantages of connecting to the TiVo service over the Internet are:

- You may disconnect your phone line from the Recorder. You only need to reconnect your phone line if you repeat Guided Setup.
- If you have Home Media Option, you can use Remote Scheduling to schedule a program to record an hour before it begins.

After you select “Yes” or “No,” you see the Phone & Network Settings screen. Press LEFT arrow to see the Phone & Network screen. The first line of Phone & Network should read: “Connect Via: Network.”

To test the new connection, select Test Connection. On the next screen, press SELECT.

CHAPTER 9

Troubleshooting

Customer Support 118

Troubleshooting 119

►► Customer Support

When you have a question:

1. **Use this chapter.** It contains troubleshooting for questions about:

The Connection to the TiVo Service	119
Channels and the Remote Control	122
Live TV.....	126
Recording Programs.....	128
Conflicts	131
Now Playing	132
Parental Controls	134
Audio/Video.....	135
Playing DVDs or CDs	137
Recording DVDs	138
The TiVo Service.....	139
Networking	141

2. **Use online support.** For hardware and TiVo Basic service questions, visit www.pioneerelectronics.com. For TiVo Plus service questions, visit www.tivo.com/support. You'll find online customer support on a number of topics.
3. **Use the troubleshooting screens on your Recorder.** On your Recorder, go to TiVo Central, then select Messages & Setup, then Troubleshooting. You will find troubleshooting screens for Parental Controls, your phone connection, your channels, and your network connection.
4. **Call Customer Support.** Refer to the *Installation Guide* for Customer Support contact information.

► Questions About the Connection to the TiVo Service

► **Why does the Recorder have to be connected to a phone line or the Internet?**

- The Recorder needs to be connected to a phone line or the Internet so that it can make periodic connections to the TiVo service. This connection downloads program information, which tells the Recorder when programs are scheduled to air and on what channel. The connection may also retrieve additional information, such as updates to the TiVo service, Showcases, and TiVolution Magazine.
- In addition, the connection sends anonymous viewing information back to TiVo—that is, anonymous information about viewing choices, which do not identify you as an individual or household. TiVo has no way to access any of your personally identifiable viewing information from your Recorder without your prior consent. Without your consent, the TiVo service has no way of knowing what shows you—as an individual or household—have watched or recorded.

► **Do I need to keep the phone connected all the time?**

- We recommend you leave the Recorder connected to the phone line all the time. The TiVo service will not interfere with other needs for the phone line, and periodic connections will keep the Recorder's program information fully up-to-date.
- You can also use a broadband Internet connection to connect to the TiVo service instead of a phone line. For more information, see Chapter 8.

► **Does the Recorder need to be connected to a phone line if I have TiVo Basic service?**

Yes, the Recorder must be connected to a phone line either TiVo Basic or TiVo Plus service.

► **My Recorder's phone connection to the TiVo service is failing.**

First, verify that your phone line is working by connecting a phone to it, then listening for a dial tone. Make sure the phone cord is connected to both the Recorder and the phone jack. If the phone line is working, continue with the troubleshooting here. If it is not working, contact your telephone service.

The following tips require changing your Phone Dialing Options. To change Phone Dialing Options, go to TiVo Central, then select Messages & Setup, then Settings, then Phone & Network, then Edit phone or network settings, then Phone Dialing Options. After you change a Phone Dialing Option, the Recorder will make a test connection to verify whether or not your problem was solved.

- Try another local dial-in number. Select “Set Dial-In Number.” Confirm your area code, then select a new number from the list of available numbers for your area.
- If you have voice mail or use another non-standard dial tone, turn off “Dial Tone Detection.” (Select “Set Dial Tone Detection,” then select “Off.”)
- If you dial a prefix for outside lines, be sure it is entered on the Phone Dialing Options screen. To enter or change a prefix, select “Set Dial Prefix,” then follow the instructions on the screen. For example, if you must dial 9 to reach an outside line, select “Set Dial Prefix,” then press “9” then the PAUSE (II) button. (This enters a 9, followed by a comma. The comma inserts a pause.)
- If you have call waiting, make sure it is disabled during the connection to the TiVo service. (Select “Set Call Waiting Prefix,” then enter the correct prefix, usually “*70.” You can enter “*70,” by pressing CLEAR, then “7,” then “0,” then PAUSE (II).)
- Your phone line may have low voltage. Set ‘Phone Avail.’ Detection to “Off.” (Select “Set ‘Phone Avail.’ Detection,” then select “Off.”) Turning ‘Phone Avail.’ Detection off may also help if you have a cordless telephone, fax machine, or computer modem connected to the same line. When ‘Phone Avail.’ Detection is off, you may hear a click on the line when the Recorder tries to call. This is the sound of the Recorder picking up the line to see if it is free.
- If you use a wireless modem jack, connect the Recorder to a standard wall jack and test whether the wireless modem jack is the source of the problem.
- If you have a caller ID box, try removing it from the line, since some models interfere with the Recorder’s ability to make a connection.
- It could be that you have too much line noise due to the length of the phone cord. Try a shorter cord, or you can buy a line noise filter at your local electronics store.

► **What if I need to use the phone while the Recorder is connecting to the TiVo service?**

- You can interrupt the phone call. To do this, pick up the phone, wait a moment, then hang it up and wait at least forty-five seconds. When you pick it up again, there should be a dial tone. Repeat this process if necessary. The Recorder will automatically connect to the TiVo service at a later time.

► **What if my phone line is busy when the Recorder tries to connect to the TiVo service?**

- The Recorder will continue to attempt to connect several times a day until it is successful. You can check the status of the connections on the Phone & Network screen (from TiVo Central, select Messages & Setup, then Settings, then Phone & Network). The status of the most recent connection displays near the top of the screen.

► **Am I charged for the periodic connection to the TiVo service?**

- TiVo uses a standard telephone line (or a broadband connection) to provide the TiVo service (including the periodic connection to the TiVo service and software updates) and is available as a local call in most areas. In some areas, however, local and long-distance toll charges may apply. Telephone costs and broadband access are not included with TiVo service, and you are responsible for any telephone or broadband charges.

► Questions About Channels and the Remote Control

► Can I watch one channel while recording from another?

- If you have antenna or cable without a cable box, you can do this by connecting an RF Coaxial cable from the RF BYPASS OUT connector on the Recorder to the Antenna/RF In connector on the TV. (You will not have TiVo service functionality on channels you watch using an RF cable that goes directly to your TV.)
- You can always watch any program stored in Now Playing while the Recorder is recording a program.

► I can't get the channel to change.

If you use cable with no cable box:

- Make sure you are using the correct remote control, and that you hold it so that the TiVo button points toward the Recorder.
- Make sure that the batteries are positioned correctly in the remote. If they are, try a new set of batteries.
- Restart your Recorder by unplugging it, waiting fifteen seconds, then plugging it back in.
- Verify that the System Information screen shows that you selected “Cable without a box” during Guided Setup. Go to TiVo Central, then select Messages & Setup, then System Information.

If you use a cable or satellite box with an IR control cable:

- Make sure the cable or satellite box is turned on.
- Make sure you are using the correct remote control, and that you hold it so that the TiVo button points toward the Recorder, not a cable or satellite box.
- Refer to the *Start Here* booklet to verify that the IR Control cable is positioned correctly.

- Press the TiVo button to go to TiVo Central, then select Messages & Setup, then Settings, then Channels, then Channel Changing, and select “IR cable.” Verify the IR code you chose during Guided Setup. See page 8 for help choosing an IR code.
- Unplug the cable or satellite box from the wall, then plug it back in.

If you use a Motorola/General Instruments DCT2000 series cable box or a DIRECTV satellite box and with a Serial Control cable:

- Make sure the cable or satellite box is turned on.
- Make sure you are using the correct remote control, and that you hold it so that the TiVo button points toward the Recorder, not a cable or satellite box.
- Refer to the *Start Here* booklet to verify that the Serial Control cable is connected correctly.
- Unplug the cable or satellite box from the wall, then plug it back in. Then try changing channels with the Recorder remote control again.
- Try using the cable or satellite box’s remote to change the channel. If it doesn’t work, contact the manufacturer or service provider for assistance.
- **Satellite Only:** You may have incorrectly specified the type of program guide for your DIRECTV satellite receiver. There are two types of DIRECTV program guides: MPG (Master Program Guide) and APG (Advanced Program Guide). During Guided Setup, you select either Serial-MPG or Serial-APG to determine how your channels are changed.

To change this option: First, unplug the power cord for the satellite receiver and plug it back in. Next, go to TiVo Central, then select Messages & Setup, then Settings, then Channels, then Channel Changing, and select “Serial cable.” If you originally selected Serial-MPG, change your selection to Serial-APG. (If you originally selected Serial-APG, change it to Serial-MPG.) You can also check the manual for your satellite receiver (as well as the satellite receiver’s system setup screen) for information on the type of DIRECTV program guide it uses.

- **Satellite or Cable:** If channels are not changing correctly using a Serial Control cable, try using the IR Control Cable. See the *Start Here* booklet or the *Installation Guide* for instructions.

► **When I turn on my TV, I see a blue screen with a TiVo logo.**

Your Recorder is having trouble tuning to the channel you are on. Follow these steps to restore the video:

- Try changing channels. If the blue screen appears on just a few channels, you may be tuned to a channel to which you do not subscribe, or you may be experiencing a weak signal on a channel to which you do subscribe. If you do not subscribe to the channel, you should take it off the “Channels You Receive” list. (For more information, see page 50.) If you do subscribe to the channel, wait 24 hours to see if the signal improves, or call your cable or satellite provider.
- If you have a satellite or cable box, go to Messages & Setup, then select Video, then Connection to Recorder. Verify that you chose the same cable on this screen that you used to connect your satellite or cable box to the Recorder.
- If the blue screen appears on every channel, and you have a cable or satellite box, make sure it is turned on.
- You may be experiencing a temporary cable or satellite outage; check with your cable or satellite provider.
- Check to make sure all of the appropriate cables are firmly connected to your Recorder, television, and other audio/video equipment. For help with your cable connections, see the *Start Here* booklet and the *Installation Guide*.
- Verify that you are receiving a video signal by temporarily connecting the video source directly to the TV. If you still do not see any video, there may be a problem with your cable, satellite, or antenna equipment.
- Restart your Recorder. (From TiVo Central, select Messages & Setup, then Restart or Reset System, then Restart the Recorder. Press THUMBS DOWN three times, then press ENTER. You will see the Welcome screen, and the system will restart within about ninety seconds. You can also restart the Recorder by unplugging it, waiting fifteen seconds, then plugging it back in.)
- The cables you are using to connect your Recorder to your TV or other equipment may be damaged or defective. Try exchanging the cables connected to the Recorder with other cables that you know are working properly.

► **I can't go to one of my channels.**

- You may be using a channel list that does not include the channel you want. Use the number buttons on the remote control to enter the channel number, then press ENTER. For more information on using a channel list, see page 50.
- The channel you want may be showing a program that exceeds a limit set with Parental Controls. In this case, you will see only a black screen with a notice that a limit has been exceeded. You will be able to tune to the channel if you use the Parental Controls password. (For more information on Parental Controls, see page 53.) If your cable or satellite box has a feature like Parental Controls, you may have to use the satellite or cable box's remote to disable it as well.

► **I can't find all the channels I receive in the Channels You Receive list.**

- Have you changed your satellite or cable provider, or changed your subscription package? If you have, you should repeat Guided Setup to specify your current cable or satellite provider and lineup. From TiVo Central, select Messages & Setup, then Restart or Reset System, then Repeat Guided Setup. Press THUMBS DOWN three times, and then press ENTER. You may need to check all of the available selections to find the right one since cable providers often change their lineups. For complete instructions on Guided Setup, see Chapter 1.
- If you have not changed your cable or satellite provider, go to Messages & Setup, then select Settings, then Channels, then Cable Lineup. Look at your cable bill, or make your best guess at what your lineup is called. Select it here, then check the Channels You Receive list. If the channels are incorrect, try another Cable Lineup. If that does not work, check the back of this guide for further troubleshooting help

► **My Recorder responds to my Pioneer A/V Receiver remote control.**

- Some Pioneer A/V Receiver remote controls have a “DVR/VCR” button or a “VCR” button which, when pressed, may send a signal that your Recorder responds to (for example, your Recorder may go to TiVo Central). You can program your Recorder to respond only to the Recorder's remote control if you wish by setting the Remote Address. See the *Installation Guide* for instructions.

► Questions About Live TV

► **Can I watch a program while it is being recorded?**

- Yes, you can watch a program as it is being recorded; you can even start watching from the beginning while the rest of the program is recorded! You can also watch any program stored in Now Playing while another program is being recorded.

► **The Channel Banner always says “To be announced.”**

- Your Recorder may not have enough program information. Make sure the Recorder has recently connected to the TiVo service to keep its program information current—using either a phone or broadband connection. Look on the Phone & Network screen (from TiVo Central, select Messages & Setup, then Settings, then Phone & Network) for the time of the last successful connection.

Upgrade to TiVo Plus

If you upgrade to TiVo Plus, you'll have up to 14 days' of program guide information. (For more information, see page 79.)

► **There aren't any shows listed in the TiVo Live Guide.**

- Your Recorder may not have enough program information. Make sure that you have recently connected to the TiVo service to keep your program information current—using either a phone line or a broadband connection. Look on the Phone & Network screen (from TiVo Central, select Messages & Setup, then Settings, then Phone & Network) for the time of the last successful connection for program information.
- Your channel lineup may no longer be valid. Repeat Guided Setup if you have recently moved or changed cable or satellite provider.
- **[TiVo Plus only]** If category filtering of the TiVo Live Guide is turned on, but no upcoming programs in the next six hours match both your filter and your Favorite Channels list, no programs will appear in the TiVo Live Guide. To view programs in the TiVo Live Guide again, use the TiVo Live Guide's Guide Options to turn off filtering. Press GUIDE to display the Live Guide, then press INFO (or ENTER) to choose "Channels You Receive" or to turn off filters.

Upgrade to TiVo Plus

If you upgrade to TiVo Plus, you'll have up to 14 days' of program guide information plus the TiVo Live Guide's Guide Options. (For more information, see page 79.)

► **I can't find my program in the TiVo Live Guide, even though I know it's on.**

- Occasionally the program information provided by the networks includes errors. We would like to hear of any inaccuracies you discover so that we can work with our providers to correct them.
- **[TiVo Plus only]** You can choose a channel list or filter to use with the TiVo Live Guide. Not all programs or channels will be displayed if you have chosen to use a filter or the Favorite Channels list. Press GUIDE to display the Live Guide, then press INFO (or ENTER) to choose “Channels You Receive” or to turn off filters. You can also add and remove channels on the “Channels You Receive” and “Favorites” channel lists.

► Questions About Recording Programs

► I can't find my program in the TiVo Live Guide even though I know it's on.

- The Recorder uses the Channels You Receive list to search for programs. To check if you've selected the program's channel, go to Messages & Setup, then select Settings, then Channels, then Channels You Receive. Does the channel have a checkmark next to it? To give it one, highlight the channel and press SELECT. (For instructions on personalizing this list, see page 50.)
- Look on the Phone & Network screen (from TiVo Central, select Messages & Setup, then Settings, then Phone & Network) for the time of the last successful connection for program information. If it was more than 36 hours ago, your Recorder may be having trouble connecting to the TiVo service. Select "Test connection" to test the current phone settings. If the test connection does not succeed, see the troubleshooting on page 119. Once you have made a successful test connection, start a connection by selecting "Connect to the TiVo service now." If your connection to the TiVo service is successful, new program information will be downloaded and organized, and become available to search in about one to five hours.
- Occasionally the program information provided by the networks includes errors. We would like to hear of any inaccuracies you discover so that we can work with our providers to correct them.
- **[TiVo Plus only]** Is your TiVo service account up-to-date? Check your account status on the System Information screen (from TiVo Central, select Messages & Setup, then System Information). If your account is past due or closed, go to www.tivo.com/manage to update your account.

► I cannot use features in Pick Programs to Record. The Recorder says it is organizing program information.

- Your Recorder may not have all its program information yet. The first time you go through Guided Setup, the Recorder downloads program information from the TiVo service. It then indexes this information in the background over the next 4 to 8 hours. As the program information gets indexed, more of it becomes available. Wait a few hours, then try to find your program again. After 8 hours, program information (for up to three days from the time of the last successful connection) is available for you to use.
- If the Recorder loses power while it is indexing program information, the indexing process will stop until the Recorder makes a successful connection to the TiVo service, and then will start again. To start a connection to the TiVo service, go to TiVo Central, then select Messages & Setup, then Settings, then Phone & Network, then "Connect to the TiVo service now."

► **What happens if a sports event I have scheduled to record goes into overtime?**

- If you are watching a program while it's being recorded, you can record an overtime segment by pressing the RECORD button after the regularly scheduled part of the program has finished.
- **[TiVo Plus only]** The TiVo service cannot predict whether a sporting event might go into overtime, but it does have a feature that lets you add extra time to the end of a recording, from one minute to three hours. This feature is called the Overtime Scheduler. (For more information, see page 76.)

The Overtime Scheduler has two options: "Start Recording" and "Stop Recording." Both are available on the Recording Options screen. You can even use the Overtime Scheduler to change the scheduled end of a recording while the program is being recorded. (Go to Now Playing, select the recording in progress, then select "Change recording options." On the Recording Options screen that appears, increase the length of the recording by anywhere from one minute to 3 hours.) You can use the Overtime Scheduler with any kind of program, not just sports.

► **Is there a way to record a program that will not be aired for weeks or months?**

- If you know the date, time, and channel on which the program will air, create a manual recording. Go to TiVo Central, select Pick Programs to Record, then Manually Record by Time/Channel. (See page 23 for details.)
- **[TiVo Plus only]** You can create an auto-recording WishList for programs that are not yet listed in the TiVo Live Guide. For example, try creating a Title WishList (see page 84 for instructions) for the program you want to find. Then set the WishList to auto-record programs that match the search.

► **How do I set the clock so that my shows are recorded on time?**

- If you are missing the beginning or end of a show, it usually means that the broadcaster is not starting or stopping the show on time.
- The TiVo service will re-sync your Recorder's clock during every service connection. If you set your time zone and Daylight Savings Time correctly in Guided Setup, you never have to worry! If you move to a new time zone, you can change your Recorder's time settings by repeating Guided Setup. To start a connection at any time, go to TiVo Central, then select Messages & Setup, then Settings, then Phone & Network, then "Connect to the TiVo service now."

- **[TiVo Plus only]** If a program regularly starts early or ends late, you can use the Overtime Scheduler to adjust the “Start Recording” and “Stop Recording” times. (For more information, see page 76.)

► **How do I record a Pay Per View event?**

- From live TV, catch up to the present broadcast by pressing the ADVANCE button. Then, order the program from your cable or satellite provider as you normally would—by using your satellite or cable box remote, or by calling your cable/satellite provider. (If the program violates a Parental Control limit—or a feature like Parental Controls on your cable or satellite box—make sure to disable both TiVo Parental Controls and your satellite or cable box’s Parental Controls.) To record the program, go to TiVo Central, then select Pick Programs to Record, then Manually Record by Time/Channel.

► **Why wasn’t my program recorded?**

Use View Recording History to find an explanation of why the program did not record (from TiVo Central, select Pick Programs to Record, then To Do List, then View Recording History). Here are *some* reasons why a program may not be available in Now Playing:

- The program may have been deleted from Now Playing by someone else.
- A conflict while watching live TV may have been resolved by not changing the channel to record the program at the time it was scheduled to start.
- There may have been a conflict when requesting another program, and the proposed resolution was to delete the missing program earlier than planned. If you accepted that resolution, the program would have been deleted.
- The program may have aired at a different time, so your scheduled recording recorded a different program.
- **[TiVo Plus only]** If you had two Season Pass recordings that were on at the same time, only the Season Pass with the higher priority would be recorded. Priorities and the Season Pass Manager are described on page 77.



Upgrade to TiVo Plus

If you upgrade to TiVo Plus, you’ll be able to get a Season Pass. A Season Pass automatically records every episode of a series that airs on a certain channel—even if the date or time slot changes. (For more information, see page 76.)

► Questions About Conflicts

► **Can I record multiple programs simultaneously?**

- No. You can watch any program in Now Playing while another is recording. However, you can only record one program at a time on your Recorder because it does not contain the necessary hardware to record two programs at once.

► **How can I record a program (or programs) when there is a conflict?**

- If a single episode of a repeating recording conflicts with another program, you can select that episode in the To Do List and delete it independently of the rest of the repeating recording.
- **[TiVo Plus only]** If you encounter a conflict for a single episode, use “View upcoming episodes” to see if the program or episode you want will air at a different time. (For more information, see page 78.)
- **[TiVo Plus only]** You can sometimes resolve recording conflicts by changing the “Stop Time” or “Start Time” Recording Options. (See page 76 for more about these Recording Options.) For example, if you set a program to start recording one minute early, it may conflict with a recording that airs right before it. To resolve such a conflict, change the “Start Time” back to “On Time” on the Recording Options screen.
- **[TiVo Plus only]** The Recorder gives each repeating recording a priority. You can resolve some conflicts in favor of preferred programs by using the Season Pass Manager to change priorities. Priorities and the Season Pass Manager are described on page 77.

► Questions About Now Playing

► **Can I recover a recorded program that was deleted?**

- No. There is no way to bring back a program that has been deleted from Now Playing. You can choose to save programs longer, though. See page 29 for details.

► **I haven't scheduled enough programs to fill my Recorder, but when I try to schedule more programs, the Recorder says there isn't room.**

- The TiVo service includes smart scheduling features that track not only how much space you currently have on your Recorder, but also how much space will be needed in the future to record all of the programs you have scheduled. If your Recorder will be full at some point in the future, the TiVo service informs you and suggests options—such as allowing some programs to be deleted early—that will allow you to schedule additional recordings. With the TiVo service, you always have the final say over what gets recorded and how long it is kept.
- The amount of recording space the Recorder needs varies from channel to channel and from program to program. In general, the more action you see on your screen, such as in fast-moving sports or action movies, the more recording space is required. Weaker video signals may also require more space. The amount of space required for each program you record affects the total hours of recording capacity of your Recorder.

► **How can I fit more programs in Now Playing?**

- To make space, delete some programs in Now Playing. You delete a program by highlighting its title, then pressing CLEAR.
- Lowering the default recording quality will allow you to fit more programs in Now Playing. (See page 63 for details.)
- **[TiVo Plus only]** Set up Season Pass recordings with the Recording Option “First-run only.” You’ll only collect new episodes. You’ll also be less likely to run out of space in Now Playing and less likely to encounter conflicts.

► **What does it mean when my Recorder says programs will be deleted earlier than planned?**

- By default, all programs are kept until space is needed. After that, programs you have not set to save longer may be deleted to make room for other recordings you request. The TiVo service includes smart scheduling features that keep track of when programs become available to be deleted, and of how much free space will be available at any given time in the future. If space will not be available to record a program you request, the TiVo service gives you the option of deleting some programs early to make more room. However, you always have the final say on how long the Recorder keeps programs. You can delete a program at any time and can always change how long it is saved by changing the “Keep until...” option. To see “Keep until...,” select the program in Now Playing.

► Questions About Parental Controls

► **My Parental Controls are not working.**

- For Parental Controls to work, they must be on (and must not be temporarily turned off). When you enter your password to watch a program that violates Parental Controls, they are temporarily turned off. You can re-enable them on the Parental Controls screen (from TiVo Central, select Messages & Setup, then Settings, then Parental Controls).
- Make sure you have set Parental Controls for each rating system. Movies that are originally meant for release to theaters have a different rating system from programs that are made for TV. You can use Parental Controls to set limits for both rating systems (see page 57). There is also a rating system for TV content that allows you to set limits for specific types of content that may be objectionable—such as sexual content or violence. Remember, these limits do not apply to DVDs. To change DVD Parental Controls, select DVD Ratings from the Ratings Settings screen

► **I disabled Parental Controls, but I still can't tune to the channel I want.**

- If your cable or satellite box has a feature like Parental Controls, make sure you have disabled them with the satellite or cable box's remote.
- You may be using a channel list that does not include the channel you want. Use the number buttons on the remote control to enter the channel number, then press ENTER. For more information on using a channel list, see page 50.

► Questions About Audio/Video

► **The audio and video are out of sync.**

- The audio and video may re-sync if you change channels.
- You may be able to re-sync audio and video by pressing the INSTANT REPLAY (▶) button.
- Audio and video should re-sync if you press the TiVo button to go to TiVo Central, then press the LIVE TV button to return to live television.
- You can also try restarting your Recorder. From TiVo Central, select Messages & Setup, then Restart or Reset System, then Restart the Recorder. On the Restart Recorder screen, press the THUMBS DOWN button three times, then press ENTER. You will see the Welcome screen and the system will restart within about forty-five seconds.

► **My Recorder was working, but now the picture does not move.**

- Try restarting your Recorder. From TiVo Central, select Messages & Setup, then Restart or Reset System, then Restart the Recorder. On the Restart Recorder screen, press the THUMBS DOWN button three times, then press ENTER. You will see the Welcome screen and the system will restart within about forty-five seconds. You can also restart the Recorder by unplugging it, waiting fifteen seconds, then plugging it back in.

► **I don't get a picture now, even though I have been able to get one in the past.**

- Someone in your household may have placed the Recorder in Sleep mode. To return to normal mode from Sleep, press either the TiVo button or the LIVE TV button.
- Your TV may not be set to the correct input. Most TVs have an input button that says either "TV/Video," "Input," or "Source." It may be on the TV or on the TV remote control. Look at your TV and TV remote and try changing the input for your TV.
- If you have your Recorder connected to a VCR, the VCR may not be set to the correct input. Most VCRs have an input button that says either "TV/Video," "Input," or "Source." It may be on the VCR or on the VCR remote control. Look at your VCR and VCR remote and try changing the input for your VCR.

- Check to make sure all of the appropriate cables are firmly connected to your Recorder, television, and other audio/video equipment. For help with your cable connections, see the *Start Here* booklet and the *Installation Guide*.

► **I can't select an alternate audio track.**

- Secondary audio programs (SAP) are not available for all programs. If you set the SAP as the default audio, programs that have SAP will use it. Only one audio track is saved with recorded programs. If SAP is the default audio and a program you are recording has an SAP, the SAP will be the recorded program's only audio. You can set the default audio on the Television Audio screen (from TiVo Central, select Messages & Setup, then Settings, then Audio, then Television Audio).
- Recorded programs, such as those in Now Playing, always have only one audio track, the one they were recorded with.
- You cannot change the audio track if you are watching a live program, but are not caught up to live TV. Catch up to live TV by pressing the ADVANCE button. Changing the audio program will clear the saved part of the program you are watching, so you will only be able to rewind live TV to the point where you changed the audio program.

► **Programs are playing in the wrong language.**

- You may have selected the secondary audio program (SAP) as the default audio on the Television Audio screen. Most programs with SAP use it to broadcast in an alternate language. To turn off the SAP, reselect the main audio program on the Television Audio screen (from TiVo Central, select Messages & Setup, then Settings, then Audio, then Television Audio).

► **My audio system is set up to play in stereo, but it is only playing mono.**

- Make sure that “Main Audio Program (stereo)” is selected on the Television Audio screen (from TiVo Central, select Messages & Setup, then Settings, then Audio, then Television Audio).
- Check to make sure all of the appropriate cables are firmly connected to your Recorder, television, and other audio/video equipment. For help with your cable connections, see the *Start Here* booklet and the *Installation Guide*.

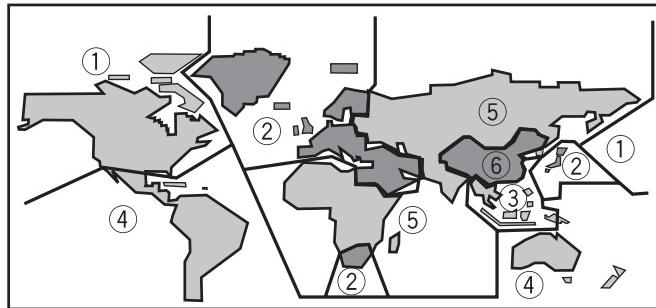
► **I can't hear TiVo sound effects.**

If the audio setting Dolby Digital output is set to “Dolby Digital,” you will not hear TiVo sound effects. (See page 49.)

► Questions About Playing DVDs or CDs

► I cannot play DVDs or CDs on the Recorder.

- You must complete Guided Setup (see Chapter 1) before the Recorder can play DVDs or CDs.
- Check that the disc is loaded properly (aligned in the disc tray with the label side up). See page 16 for an illustration of proper alignment.
- Remove the disc and clean it. See “Disc Care” on page 45.
- Check that the disc has a region code compatible with the Recorder. If one of the regional codes on the disc does not match the number on the back panel of the Recorder (region code 1), the disc cannot be played. Discs marked ALL will play in any DVD player. Regional restriction codes are built-in to DVD players and DVDs for each sales region.



9

- There may be condensation in the player. Allow time for condensation to evaporate. Leave the Recorder for an hour or so, then try again. If the Recorder is near an air-conditioning unit, you should move the Recorder.

► The Recorder is not playing audio on a DVD.

- If playing a DTS DVD, the Recorder must be connected to a DTS Receiver to receive audio.

► Questions About Recording DVDs

► **The DVD did not record successfully.**

- Check whether the source that you are trying to record is copy protected. You cannot record copy-protected material using this Recorder. For more information, see “Copy Protected Material” on page 35.
- Check that there wasn’t a power outage during the recording.

► **I can’t play a DVD disc that I recorded using this Recorder in another DVD player.**

- Not all DVD players will play all discs, even if the disc has been finalized.

► **I can’t copy programs onto a DVD disc I purchased.**

- The Recorder will only copy onto DVD-R and DVD-RW discs. It will not copy onto other disc formats (such as DVD+R or DVD+RW) . For more information, see “Compatibility and Copy Protected Material” on page 32.

► Questions About the TiVo Service

► **Will my Recorder still work without any TiVo service?**

- The Recorder was designed to be used exclusively with at least one level of TiVo service (such as TiVo Basic or TiVo Plus). TiVo service is required for proper operation of the Recorder. No functionality is represented, warranted, or should be expected without TiVo service. TiVo service provides the Recorder with program information to record the programs you request. TiVo service may also provide you with new Showcases and TiVolution Magazine content. The Recorder must make periodic connections to the TiVo service to maintain its service level (such as TiVo Basic or TiVo Plus).

► **What is TiVo Basic service?**

- TiVo Basic service allows you to control live TV (pause, fast forward, instant replay), and record programs from a specific channel at a specific time (much like a VCR) to Now Playing. It also includes an on-screen interactive program guide that provides information on your favorite shows. In addition, Showcases and TiVolution Magazine help you get more out of your TV time.

► **What is TiVo Plus service?**

- With TiVo Plus service, you can enjoy the benefits of smart, automatic-recording technology. TiVo Plus brings you features such as:
- **Season Pass recordings.** Automatically record every episode of your favorite series, all season long, even if the schedule changes.
- **WishList searches.** Find and record programs by actor, director, sports team, etc.
- **Search by Title.** Browse for shows by title, filter by genre (like “Comedy”), and more.
- **Interactive 14-day program guide.** Instantly schedule recordings from an on-screen guide that includes detailed program information, including show summaries and ratings, for up to 14 days of programming.
- **More smart features.** TiVo Plus skips reruns, tracks schedule changes, and more!

- Not sure? For a limited time, you can try TiVo Plus service simply by accepting our **free trial** once you get set up. You won't be charged a penny until you upgrade to TiVo Plus service via the TiVo web site (www.tivo.com/upgrade) or by calling TiVo directly at 1-877-367-8486. When you upgrade to TiVo Plus, you will register the service number of your Recorder and choose a billing option.

▶ **What happens if my Recorder loses power temporarily?**

- Everything is saved—including your Now Playing programs—regardless of the length of time the Recorder is without power. Programs scheduled to record during a power outage will not record.

▶ **Will the TiVo service collect information about my viewing habits?**

- TiVo has designed its system and instituted policies to ensure that TiVo is unable to access any of your *personally identifiable* viewing information without your prior consent. TiVo does collect *anonymous* viewing information; that is, information about viewing choices made while using your Recorder, which does not identify you as an individual or household. In other words, there is no contact information associated with the viewing information that could identify it as coming from you or your household. For more information on the TiVo Privacy Policy, see Chapter 10 or visit www.tivo.com/privacy.

▶ **How is information from the TiVo service delivered to my Recorder?**

- The Recorder automatically makes a periodic connection to the TiVo service. This connection downloads program information and other data. Information is also occasionally delivered by a special TiVo program that is broadcast late at night and recorded when it does not conflict with any of your previously scheduled recordings.

► Questions About Networking

► **I can't find "Edit phone or network settings."**

- The menu item “Edit phone settings” will change to “Edit phone or network settings” after you connect a network adapter that the Recorder recognizes to the Recorder’s USB port. To see the Phone & Network screen, press the TiVo button to go to TiVo Central, then select Messages & Setup, then Settings, then Phone & Network. If you have attached an adapter and still see “Edit phone settings:”
 - Make sure the USB cable between the adapter and the Recorder is plugged firmly into both devices.
 - Confirm that you are using a recommended adapter. Check the list under “USB Port, Wireless and Wired Network Adapters” on page 103. You may need to use a different adapter.

► **My Recorder is not connecting to the TiVo service.**

- You can make the Recorder connect to the TiVo service at any time. Press the TiVo button to go to TiVo Central, then select Messages & Setup, then Settings, then Phone & Network, then “Connect to the TiVo service now.”
- Your Recorder can connect to the TiVo service via a home network’s always-on broadband Internet connection, or via a phone line. To change the type of connection your Recorder uses to connect to the TiVo service, press the TiVo button to go to TiVo Central, then select Messages & Setup, then Settings, then Phone & Network, then “Change connection type.”
- If your Recorder is having trouble connecting via a broadband Internet connection:
 - **Check that the Internet connection is available, then troubleshoot.** There are two links in the chain between your Recorder and the Internet: your Recorder’s connection to your home network, and your home network’s connection to the Internet. First, confirm that the connection between your home network and the Internet is working. Try to go online and browse a web site from a computer on the same network as your Recorder. If you cannot browse the Internet, you must fix the connection from your network to the Internet. After you have fixed this connection, try again to make your Recorder connect to the TiVo service. (Press

the TiVo button to go to TiVo Central, then select Messages & Setup, then Settings, then Phone & Network, then “Connect to the TiVo service now.”) If you can browse the web, then see “My Recorder is not connecting to my home network,” below.

- **Use a phone line.** Use a regular phone line to connect to the TiVo service.
- If your Recorder is having trouble connecting over a regular phone line:
 - **Use broadband.** If you have a home network with a broadband Internet connection, try allowing your Recorder to use it to connect to the TiVo service over the Internet. Doing this eliminates the Recorder’s need to use a phone line. See Chapter 8 for more details.

► **My Recorder is not connecting to my home network.**

- Any of the steps below may fix a network connection; you probably will not have to complete each one. For additional steps for wireless networks, see “My Recorder is not connecting to my wireless home network.” on page 144.

1. Check network adapter.

- The network adapter that you attached may not be supported. If your network adapter is compatible with your Recorder, and functioning properly, a MAC address—an identifier unique to the network adapter you purchased—is visible on the Phone & Network screen. To check, from TiVo Central, select Messages & Setup, then Settings, then Phone & Network. The MAC address should be on the top right-hand side of the Phone & Network screen. If you do not see a MAC address listed, your Recorder is not recognizing the network adapter you installed. The adapter is either not compatible, not functioning properly, or not properly connected. If you do see a MAC address, the adapter you are using may or may not be compatible. For more information, see “USB Port, Wireless and Wired Network Adapters” on page 103.
- The network adapter or cabling could be defective. If you have another adapter or USB cable available, try that adapter or cabling.

2. Check connection to the network adapter. Unplug the USB cable from the back panel of your Recorder and then plug it back in. Make sure the cable is pushed all the way in; sometimes lights on the adapter turn on before the USB cable is pushed all the way in. Unplug the side of the USB cable connected to the adapter and then plug it back in.

3. **Restart the Recorder.** Press the TiVo button on the remote control to go to TiVo Central, then select Messages & Setup, then Restart or Reset System, then Restart the Recorder. Press THUMBS DOWN three times, then press ENTER.
4. **Check physical connections.** Ensure that all network equipment is receiving power and all cable connections for routers, hubs, access points, and computers on the network are working. Verify that the “connection” light is lit on devices connected to the network.
5. **Powercycle network devices.** If you have a router or wireless access point, unplug it, wait a moment, and then plug it back in. This will temporarily halt your network’s Internet connection. It may take up to a minute for your equipment to “restart” after you plug it back in.
6. **Check your Network Settings.** Verify that your Network Settings are correct. Complete TCP/IP Settings, even if you did not when you first connected your Recorder. For more information, see “Completing the Recorder’s Network Settings” on page 108.
7. **Update router or home gateway firmware.** If your home network includes using a router, home gateway, or wireless access point, it may need a firmware update. Firmware is a software program that is loaded onto a hardware device. You can usually find any updated firmware at the Customer Support web site for the manufacturer of your hardware. (For example, if you have a Linksys device, check <http://www.linksys.com/download/>.) Older firmware may cause unpredictable results. It may be necessary to power-cycle your device before and after you reinstall the firmware.
8. **Check Static IP Address.** If you assigned an IP address to your Recorder, check that its IP address is unique on your network. Also, confirm that the first three sets of numbers of the Recorder’s IP address are the same as those of other devices on the network. (For example, if your computer’s IP address starts with “192.168.1” then your Recorder’s IP address must also start with “192.168.1”.)
 - You may have assigned a static IP address on a network with a DHCP server. If your network includes a DHCP server (for example, as part of your router), you should not assign static IP addresses to devices on the network. Go to TiVo Central, then select Messages & Setup, then Settings, then Phone & Network, then Edit phone or network settings, then TCP/IP Settings, then select “Obtain IP address automatically.”

If you have a wireless network and haven’t already done so, you should also try the steps in “My Recorder is not connecting to my wireless home network.” on page 144.

► **My Recorder is not connecting to my wireless home network.**

Connecting to the network access point may take several minutes once the problem is resolved. Be certain the Phone & Network screen has had time to update to display the true network status before making any additional changes. To refresh the Phone & Network screen using the remote control, press the LEFT arrow to go to the previous screen, and then press the RIGHT arrow to return to the Phone & Network screen.

1. **Check power at wireless access point.** Ensure the wireless access point or wireless router is receiving power and that the “connection” light is on.
2. **Change password format.** If you used an alphanumeric password for your wireless network, try using a hexadecimal password instead. You can find a hexadecimal password (sometimes referred to as a “Key” or “WEP Key”) in the configuration settings for your wireless access point or wireless router. If more than one hexadecimal password is listed, always use the first one. To change the password format, follow the instructions for completing Wireless Settings at “Wireless Settings for a Home Network” on page 108.
3. **Check signal strength.** On the Phone & Network screen (press the TiVo button to go to TiVo Central, then select Messages & Setup, then Settings, then Phone & Network), check the wireless signal strength.

The following may improve wireless signal strength:

- Make sure the wireless adapter is placed well away from the Recorder’s power supply, or power strips, or surge protectors. Any of these may cause interference and reduce signal strength. Some household appliances, such as microwave ovens and 2.4 GHz cordless phones, may also reduce signal strength when they are in use.
- Verify that the wireless network adapter’s antenna is fully extended.
- Move the wireless network adaptor to a higher position, or give it a better line of sight to your wireless gateway (router).

- Reduce the distance between the wireless network adapter and the wireless access point. Wireless networks typically have a range of 100 - 300 feet, but distances can vary based on walls, floors, and other obstructions. It may be necessary to adjust the location adapter of your wireless access point or router to be closer to the network adapter attached to your Recorder(s).
 - Consider adding a signal booster to your network (available from some wireless equipment manufacturers).
4. **Check network name.** On the Wireless Settings screen (press the TiVo button to go to TiVo Central, then select Messages & Setup, then Settings, then Phone & Network, then Edit phone or network settings, then Wireless Settings), check that the network name (SSID) for your network access point is listed correctly. To change the network name, follow the instructions for completing Wireless Settings at “Wireless Settings for a Home Network” on page 108.

If you haven’t already done so, you should also try the steps in “My Recorder is not connecting to my home network.” on page 142.

CHAPTER 10

Privacy and Service

TiVo Privacy Policy	149
TiVo Basic Service Agreement	156
TiVo Plus Service Agreement	158

TiVo Inc. ("TiVo") is committed to protecting the privacy of your personal information. The TiVo Privacy Policy is published on the World Wide Web at www.tivo.com/privacy. We have printed it here for your convenience, but we encourage you to check the web site or call us for a copy of the current Privacy Policy. This Privacy Policy applies to your use of TiVo Basic service and the TiVo Plus service, as the case may be. For purposes of convenience only, the TiVo Basic service and the TiVo Plus service are each referred to individually as the "TiVo service" in this Privacy Policy. Where the Privacy Policy differs depending on the type of service you have, that difference will be noted.

Use of your Pioneer DVD Recorder with TiVo (referred to in this Privacy Policy as your "TiVo DVR") with the TiVo service will signify your acceptance of this Privacy Policy. Thank you for using the TiVo service!

► **Summary of the TiVo Privacy Policy**

TiVo knows how important personal privacy is to you, so we have designed our system and established strict policies to help protect the privacy of your Personally Identifiable Viewing Information. In summary, we want you to know that:

- The TiVo DVR collects certain types of information from its users, including Anonymous Viewing Information, Diagnostic Information, Commerce Information, and Service Information (each as defined below).
- TiVo has no way to access any of your Personally Identifiable Viewing Information (as defined below) from your TiVo DVR without your prior consent. Absent your consent, TiVo has no way of knowing what shows you-as an individual or household- have watched, recorded, or rated with "Thumbs

Up" or "Thumbs Down." **NOTE:** If your TiVo DVR is receiving the TiVo Basic service, you may not be able to consent to TiVo's collection of your Personally Identifiable Viewing Information from that TiVo DVR.

- TiVo does collect Anonymous Viewing Information; that is, information about viewing choices made while using your TiVo DVR, but that does not identify you as an individual or household. In other words, there is no personally identifiable information associated with your Anonymous Viewing Information that could identify the Anonymous Viewing Information as coming from you or your household.
- TiVo also collects Diagnostic Information from a small number of randomly sampled TiVo DVRs for quality control purposes. If you subscribe to the TiVo Plus service and don't want your Anonymous Viewing Information and Diagnostic Information used in any way, simply tell us by writing to us or calling us at 1-877-367-8486. **NOTE:** If your TiVo DVR is receiving the TiVo Basic service, you may not opt out of TiVo's collection of Anonymous Viewing Information or Diagnostic Information from that TiVo DVR; however, you are not required to provide TiVo with any Contact Information (as defined below) with respect to that TiVo DVR.
- If you affirmatively elect to engage in a commercial transaction such as by responding to an advertisement or promotion, TiVo will collect and disclose your Commerce Information (as defined below) to the commerce partner fulfilling the transaction. **NOTE:** If your TiVo DVR is receiving the TiVo Basic service, you may not be able to engage in commercial transactions from that TiVo DVR.

- If you affirmatively elect to use the Remote Scheduling feature of TiVo's Home Media Option™ package, TiVo will collect the Personally Identifiable Viewing Information associated with fulfillment of your individual request(s). Use of the Remote Scheduling feature, however, does not change your privacy preferences with respect to viewing choices made in the privacy of your household. **NOTE:** If your TiVo DVR is receiving the TiVo Basic service, you may not purchase the Home Media Option package for use on that TiVo DVR.
- TiVo intends to make available new services in the future. These services will be governed by the privacy policies of the respective service providers.
- **NOTE TO TIVO BASIC SERVICE CUSTOMERS:** If your TiVo DVR is receiving the TiVo Basic service, you may not (i) be able to opt out of our collection of Anonymous Viewing Information and Diagnostic Information from that TiVo DVR, (ii) opt out of your receipt of communications we send you in the event you provide us with Contact Information (though you are not required to provide us with any Contact Information as to that TiVo DVR), or (iii) be able to change your privacy preferences to allow TiVo to collect Personally Identifiable Viewing Information from that TiVo DVR.
- **NOTE TO CUSTOMERS WITH MORE THAN ONE TIVO DVR:** Generally, TiVo will cause all of all the TiVo DVRs on your account receiving the TiVo Plus service to have the same "opt" status. See Sec. 2.9 of the Privacy Policy for further details.

► TiVo Privacy Policy

Please read this Privacy Policy carefully. It provides important information on how your privacy is protected when using the TiVo service.

In order to provide you with a better, more satisfying television experience, TiVo Inc. ("TiVo") collects and uses certain types of information, as described in this Privacy Policy. The User Information (defined below) you provide to the Pioneer DVD Recorder with TiVo (referred to in this Privacy Policy as your "TiVo DVR") in your house and to us at TiVo enables your TiVo DVR to select programs you want it to record and, if you are TiVo Plus service user, to suggest programs you might enjoy.

By using your TiVo DVR and the TiVo service, you consent to the provisions of this Privacy Policy including the privacy preferences set forth in Section 4.1. This Privacy Policy explains our commitments to your privacy in the following areas:

- 1 **Our User Information Definitions.** In discussing the kind of information TiVo collects, it is important to distinguish between anonymous information and other information that specifically identifies you or your household. Too often, people refer to "personal information" or "personally identifiable information" without really making clear what they mean. TiVo has developed the following definitions to help clarify this important issue. We use "User Information" as a general term that refers to any information relating

to you or your use of the TiVo service. The following are more specific types of User Information.

1.1 “Account Information” means information about you and your TiVo DVR, including your Contact Information (defined below) and other information linked to your Contact Information such as the model and Service Number of your TiVo DVR, your ZIP code, software version used, your TV programming source (cable, satellite or an antenna), the type of cable hook-up (digital or analog) and level of TiVo service (TiVo Basic, TiVo Plus, premium services, etc.), privacy preferences, and the cable or satellite box model that you use. You provide us with this information when (a) you set up your TiVo DVR with TiVo Basic service or (b) when you register as a user of the TiVo Plus service. This Service Information (defined below) is sent to TiVo on an ongoing basis to enable TiVo to provide the TiVo service to your TiVo DVR. Account Information also includes information we may receive about you in a communication from you or a third party. Account Information does not include any Personally Identifiable Viewing Information, or Anonymous Viewing Information, as defined below.

- a “Contact Information”** means information that allows someone to identify or contact you, including, for example: your name, address, telephone number, and e-mail address. Contact Information is a subset of Account Information and is thus linked to your TiVo DVR’s Service Number. Your ZIP code by itself, while part of your address, is not Contact Information because your ZIP code alone does not allow someone to identify or contact you. **NOTE:** If your TiVo DVR is receiving the TiVo Basic service, you are not required to provide TiVo with any Contact Information from that TiVo DVR.
- b “Service Information”** means information necessary for TiVo to provide service to your TiVo DVR. Examples of Service

Information include your software version number, your TV programming source, level of service, and the success status of the last attempted service connection (e.g., periodic call). This information is always transmitted to TiVo when connected to the TiVo servers.

1.2 “Personally Identifiable Viewing Information” means information about the viewing choices that you and those in your household make while using your TiVo DVR, if that information is linked to or associated with your Account Information. Your TiVo DVR stores your viewing information so that it may recommend viewing choices and personalize your viewing experience. We have worked very hard to design our system to ensure that no Personally Identifiable Viewing Information may be sent to TiVo without your express consent. If you use the TiVo Plus service, you may choose to consent to TiVo’s collection of Personally Identifiable Viewing Information by changing your privacy preferences as provided in Section 4.1. **NOTE:** If your TiVo DVR is receiving the TiVo Basic service, you may not be able to consent to TiVo’s collection of Personally Identifiable Viewing Information from that TiVo DVR.

1.3 “Anonymous Viewing Information” means information about viewing choices that you and those in your household make while using your TiVo DVR, but is not associated with or linked to any Contact Information. Your TiVo DVR sends Anonymous Viewing Information to TiVo on an ongoing basis. This information allows TiVo to know that a TiVo service user from a particular ZIP code watched certain programming but we are unable to associate those viewing choices with you. If you use the TiVo Plus service, you may request that TiVo block the collection of Anonymous Viewing Information from your TiVo DVR as described in Section 4.1. **NOTE:** If your TiVo DVR is receiving the TiVo Basic service, you may not opt out of TiVo’s collection of Anonymous Viewing Information from that TiVo DVR.

1.4 “Diagnostic Information” means a log file containing detailed information about the operation of your TiVo DVR, such as memory consumption, user interface response time, disk space, enclosure temperature, and enclosure fan speed. Diagnostic Information logs contain your TiVo DVR’s Service Number and are thus associated with your Account Information. If you use the TiVo Plus service, you may request that TiVo block the collection of Diagnostic Information logs from your TiVo DVR as described in Section 4.1. **NOTE:** If your TiVo DVR is receiving the TiVo Basic service, you may not opt out of TiVo’s collection of Diagnostic Information from that TiVo DVR.

1.5 “Commerce Information” means personally identifiable information that enables a commerce partner to fulfill your request to participate in a promotion or transaction. From time to time, TiVo may present special offers and/or enable you to purchase goods and services from TiVo, or third party advertisers or promoters. You would be informed of such offers on screen while using the TiVo Plus service. Should you decide to take advantage of such an offer or engage in a transaction, TiVo will collect and communicate your relevant Contact Information and your interest in a specific offer or transaction to the commerce partner sponsoring the promotion or transaction. In addition to fulfilling your request, that commerce partner may also use your Commerce Information to send you other information in which you might be interested consistent with its own privacy policies. This information is collected and disclosed by TiVo only upon your affirmative response to an offer. **NOTE:** Depending on your level of TiVo service and the model of your TiVo DVR, such features may not be available to you.

1.6 “Feature-Generated Request Information” means personally identifiable information about television programming that you request your TiVo DVR to record or identify using a feature offered by TiVo, such as Remote Scheduling. Should you decide to use such a feature, TiVo will collect the Personally Identifiable Viewing

Information associated with the fulfillment of your recording (or scheduling conflict) request. TiVo may use this Personally Identifiable Viewing Information as described in Section 2.2. TiVo collects this information only upon your affirmative choice to use a particular feature. **NOTE:** Depending on your level of TiVo service and the model of your TiVo DVR, such features may not be available to you.

2 Use of User Information

2.1 Account Information. We use your Account Information to establish and provide you with your TiVo service, provide the necessary resources to your TiVo DVR, offer you new services when they are available, and other legitimate business purposes. For example, we use your e-mail address to communicate with you regarding new services, and to exclude you from offers for services you may already have. If you use the TiVo Plus service, we also use such information to create your account with TiVo and to bill you for the TiVo Plus service. Knowing your ZIP code, programming source, and information about your cable or satellite box model allows us to determine which programming information (e.g., times and channels of programs) to send to your TiVo DVR.

We use your Account Information to communicate with you about upcoming features in the TiVo service or promotions that might interest you. If you use the TiVo Plus service, you may opt not to receive communications in the future as explained in Section 4.1. We also use your Account Information in aggregate form (i.e., excluding any Contact Information) to generate demographic profiles of our users as a whole to assist us to, for example, identify future users of the TiVo service or other services. **NOTE:** If your TiVo DVR is receiving the TiVo Basic service, and you choose to provide us with Contact Information, you may not opt out from receiving communications in the future. However, you are not required to provide us with any Contact Information so long as that TiVo DVR is receiving the TiVo Basic service.

2.2 Personally Identifiable Viewing Information. Your TiVo DVR uses your viewing information to tune, schedule, and record programs. If you have the TiVo Plus service, your TiVo DVR also uses your viewing information to recommend programs for you. Your TiVo DVR may also use this viewing information to select advertisements or other promotions for you that you may be interested in. TiVo does not receive the Personally Identifiable Viewing Information stored on your TiVo DVR without your consent. Absent your consent, no “tag” is added to the Anonymous Viewing Information transmitted from your TiVo DVR to TiVo that would enable TiVo to identify the TiVo DVR from which it came. If you expressly choose to allow TiVo to collect your Personally Identifiable Viewing Information, TiVo may use this information for surveys, audience measurement, and other legitimate business purposes. **NOTE:** If your TiVo DVR is receiving the TiVo Basic service, you may not be able to allow TiVo to collect your Personally Identifiable Viewing Information from that TiVo DVR.

2.3 Anonymous Viewing Information. We use Anonymous Viewing Information to develop reports and analyses about what programs, advertisements, and types of programming our users (as a whole or in subgroups) watch or skip, for other programming or advertising research, and for any other legitimate business purpose. For example, we use Anonymous Viewing Information to develop inferences that people who watch show X also watch show Y. We also use Anonymous Viewing Information to help with the investigation of technical issues with our systems.

2.4 Diagnostic Information. TiVo collects Diagnostic Information logs from a small number of randomly sampled TiVo DVRs for quality control and technical troubleshooting purposes.

2.5 Commerce Information. TiVo uses Commerce Information as described in Section 1.5.

2.6 Feature Generated Requests Information. TiVo uses Feature Generated Request Information for the purposes described in Section 1.6.

2.7 Activating the TiVo Plus Service. When you activate a TiVo DVR that was receiving TiVo Basic service to receive the TiVo Plus service, and it is the only TiVo DVR on your account receiving the TiVo Plus service, your TiVo DVR will provide Anonymous Viewing Information and Diagnostic Information to TiVo. You may opt in to the collection of Personally Identifiable Viewing Information or opt out of TiVo’s collection of Anonymous Viewing Information and Diagnostic Information pursuant to the terms and conditions of this Privacy Policy.

2.8 Reverting to the TiVo Basic Service. If you decide to terminate your TiVo Plus service, and your TiVo DVR is eligible to receive the TiVo Basic service, that TiVo DVR will retain the opt status that it had when the TiVo Plus service is terminated. **NOTE:** Your TiVo DVR may not be eligible to receive the TiVo Basic service. Consult your *User’s Guide* to determine if your TiVo DVR is eligible to receive the TiVo Basic service.

2.9 TiVo Customers with Multiple TiVo DVRs. TiVo will cause all of the TiVo DVRs on your account to have the same “opt” status. This means that if you opt out of our collection of Anonymous Viewing Information and Diagnostic Information from one TiVo DVR, we will not collect Anonymous Viewing Information and Diagnostic Information from any of the TiVo DVRs. If you request that TiVo collect your Personally Identifiable Viewing Information from one TiVo DVR, TiVo will collect Personally Identifiable Viewing Information from all of the TiVo DVRs on your account.

3 Disclosure of User Information

3.1 Generally. We disclose aggregated Account Information and aggregated Anonymous Viewing Information and any reports or analyses derived therefrom, to third parties including advertisers,

broadcasters, consumer and market research companies and other organizations.

- 3.2 Manufacturing and Service Provider Partners.** In certain instances we will disclose to our hardware manufacturing partners and service provider partners (for example DIRECTV) the Account Information of users who have a DVR made by that manufacturing partner or receive a service from that service provider partner. However, TiVo contractually binds our manufacturing and service provider partners to comply with the provisions of this Privacy Policy. Our manufacturing and service provider partners are legally liable for misuse of User Information.

- 3.3 Contractors and Third Party Service Providers.** We use contractors to help with some of our operations. Some of these contractors will have access to our databases of User Information on a temporary basis for specific tasks. TiVo also uses third parties to help with certain aspects of its operations, which may require disclosure of your User Information to them. For example, TiVo may use a third party to communicate with you (via telephone, e-mail, or letter) about your TiVo service or upcoming features or services, to mail rebate checks, to generate demographic profiles based on User Information of current TiVo service users, and to perform other work that we may need to outsource. If you are a TiVo Plus service user, TiVo may additionally use a third party to process and collect payment for your TiVo Plus service via your credit card. TiVo contractually binds these contractors and third parties to use your User Information only as necessary to perform the services they are asked to perform. Such contractors and third parties are legally liable for misuse of User Information.

- 3.4 The “Corporate Family.”** Although TiVo currently does not have a parent company, any subsidiaries (other than TiVo International, Inc. and TiVo UK Ltd., which provides TiVo service in the United Kingdom), joint ventures, or other companies under a common control (collectively, “affiliates”), it may in the future. TiVo may

share some or all of your User Information with these affiliates, in which case TiVo will require its affiliates to honor this Privacy Policy. If another company acquires TiVo, or acquires assets of TiVo that comprise or include your User Information, that company will possess the User Information collected by TiVo and it will assume the rights and obligations regarding your User Information as described in this Privacy Policy.

- 3.5 Commerce Partners.** When you elect to participate in a special offer or engage in a transaction with TiVo or a third party advertiser or promoter, TiVo will collect and disclose your Commerce Information to the commerce partner sponsoring and/or fulfilling the promotion. In addition to fulfilling your request, that commerce partner may also use your Commerce Information to send you other information in which you might be interested consistent with its own privacy policies. This information is disclosed only upon your affirmative response to an offer. **NOTE:** Depending on your level of TiVo service and the model of your TiVo DVR, such features may not be available to you.

- 3.6 Factors Beyond Our Control.** Your privacy is very important to us. Due to factors beyond our control, however, we cannot fully ensure that your User Information will not be disclosed to third parties. For example, we may be legally obligated to disclose User Information to local, state or federal governmental agencies or third parties under certain circumstances (including in response to a subpoena), or third parties may circumvent our security measures to unlawfully intercept or access your User Information.

4 Your Choices Regarding User Information

- 4.1 Limits on TiVo’s Collection, Use, and Disclosure of User Information.** The default privacy preferences, to which you hereby consent, do not allow TiVo to collect Personally Identifiable Viewing Information, but do allow TiVo to collect, use, and disclose Anonymous Viewing Information and Diagnostic Information logs,

in addition to Account Information, in manners consistent with this Privacy Policy. Commerce Information is collected, used, and disclosed only upon your affirmative response to an offer. Feature-Generated Request Information is collected, used, and disclosed only upon your affirmative choice to use a particular feature. **NOTE:** Depending on your level of TiVo service and the model of your TiVo DVR, such features may not be available to you.

Even though Anonymous Viewing Information and Diagnostic Information do not include any Contact Information, if your TiVo DVR is receiving the TiVo Plus service, you may request that TiVo block the collection of Anonymous Viewing Information and Diagnostic Information from your TiVo DVR. If your TiVo DVR is receiving the TiVo Plus service, you may further opt not to receive communications that we send to you based on your Account Information; provided, however, that we will still send you communications TiVo deems important regarding your TiVo Plus service. If you make this choice, you understand that we will not be able to inform you about any upcoming features, improvements, or promotions regarding your TiVo Plus service. In all cases, however, we will collect and use your Account Information (including Service Information) to enable us to provide your TiVo DVR with the TiVo Basic service and the TiVo Plus service. If your TiVo DVR is receiving the TiVo Plus service, you may choose to change your privacy preferences to allow TiVo to collect Personally Identifiable Viewing Information from your TiVo DVR.

If you are a TiVo Plus customer and you would like to change your privacy preferences, you must either (a) send TiVo a signed written request at the address set forth in Section 8.3, or (b) call us at 1-877-367-8486 to request a change. **NOTE:** Please see Sections 2.7, 2.8, and 2.9 above for important provisions if you have a TiVo DVR eligible to receive the TiVo Basic service and if you have multiple TiVo DVRs.

4.2 Review and Update of Account Information. We believe you have a right to know your Contact Information, billing information, and privacy preferences collected and stored by TiVo and to update or change such information you believe is incorrect. You may make a request by telephone, mail, or via the web (if and when available) to review such information and we will mail you a printout of such information. If you request that certain parts of such information be changed, we will make the changes to the extent commercially practicable. In addition, we will take commercially reasonable steps to propagate those changes to third parties with whom we may have shared such information pursuant to this Privacy Policy.

4.3 How to Delete Information. Should you decide to discontinue your TiVo Plus service, you may make that request by telephone or mail and we will suspend billing for the TiVo Plus service. After you discontinue the TiVo service, TiVo will maintain your Account Information only as long as necessary for business purposes. In addition, although we delete your Account Information from our “live” database, your Account Information may remain in our archives and records until they are destroyed. **NOTE:** If your TiVo DVR is eligible to receive the TiVo Basic service then upon termination of the TiVo Plus service you may elect to continue receiving the TiVo Basic service. In such a case, TiVo may maintain your TiVo Plus service Account Information until such time as your TiVo Basic service is terminated. Consult your *User’s Guide* to determine if your TiVo DVR is eligible to receive the TiVo Basic service.

5 Comment Regarding Children. TiVo feels strongly about protecting the privacy of children and encourages parents to be involved in the television viewing of their minor children by, for example, limiting the types of content minor children can watch.

6 Separate Rules for the TiVo Web Site. We have a separate privacy policy that covers activities on our web site. However, if you register for TiVo service on the Web, or log in to your account

preferences page (when available) to make changes to your account or request services, this Privacy Policy will apply to the User Information you provide to us in those instances. If you use the TiVo web site to access certain features or services such as Remote Scheduling, we may institute amendments and modifications to this Privacy Policy addressing the handling of your information in providing you such features or services to which you must agree if you wish to use such features or services.

7 Security of User Information. When you contact us by e-mail or phone regarding your TiVo service, we ask you for certain Account Information—in order to verify your identity—before accepting requests to make changes to your TiVo service. We take these steps to ensure that only you or a household member who knows your Account Information will be able to access or change your User Information.

TiVo uses industry-standard methods such as encryption to secure the communication of viewing information from your TiVo DVR to TiVo. In addition, TiVo uses industry-standard methods of securing its databases of User Information, including the use of firewalls.

Except as provided elsewhere in this Privacy Policy, TiVo limits access to User Information databases to those persons in the TiVo organization who have a business need for such access, including servicing your account, informing you of service news and special TiVo offers, or aggregating Account Information or Anonymous Viewing Information for the purpose of conducting research, and targeting new users. However, you should know that no company, including TiVo, can fully eliminate security risks associated with User Information.

8 General

8.1 Future Features, Services, and Amendments to this Privacy Policy.

We may add to or upgrade the TiVo service to provide you with new features on an ongoing basis. We may also make available new services in the future. New services will be governed by the privacy policies of the respective service provider.

To the extent that any new features or services may require amendments to this Privacy Policy to describe the treatment of User Information, these amendments are effective upon notice to you. In the event that we make a substantial and material change to our treatment of User Information, such as a change in the way that we collect, use, or disclose Personally Identifiable Viewing Information, we will notify you of such planned change and offer you the opportunity to alter your privacy preferences.

8.2 Technical Problems. Even though TiVo has taken significant steps to ensure that your User Information is never collected, used, or disclosed by TiVo except as set forth by this Privacy Policy, technical mistakes are possible. If such a mistake takes place, we will take commercially reasonable steps to correct it.

8.3 Contact TiVo. Our intention is to be diligent in protecting your privacy by strictly following our Privacy Policy. If you would like to make suggestions or find out more about our privacy practices, please call us at 1-877-367-8486 or send us a letter.

Our mailing address is TiVo Inc., ATTN: Privacy Policy, 2160 Gold Street, P.O. Box 2160, Alviso CA 95002-2160.

8.4 Entire Agreement. The term “including” in this Privacy Policy shall mean “including without limitation.” This Privacy Policy supplements and is incorporated into the TiVo Basic Service Agreement, the TiVo Plus Service Agreement, and any other TiVo service Agreements. This Privacy Policy constitutes the entire agreement, and replaces and supersedes all prior agreements, between you and TiVo concerning the subject matter discussed in this Privacy Policy. Use of your TiVo DVR with TiVo service will signify your acceptance of this Privacy Policy.

BY USING THE TIVO SERVICE, I REPRESENT THAT I HAVE READ AND UNDERSTOOD THIS ENTIRE PRIVACY POLICY AND I AGREE TO ALL THE TERMS OF THIS PRIVACY POLICY AS STATED ABOVE.

TiVo Service Privacy Policy v20030522A

► TiVo Basic Service Agreement

Welcome to TiVo and the TiVo Basic service! This agreement explains the terms and conditions that will apply to your use of the TiVo Basic service and constitutes a legally binding agreement between you and TiVo Inc. ("TiVo"). By using the TiVo Basic service, you agree to all the terms and conditions in this agreement ("Agreement").

► The TiVo Basic Service and the Privacy Policy

1. **Terms of Service.** The TiVo logo on your Pioneer DVD Recorder with TiVo (referred to in this TiVo Basic Service Agreement as your "TiVo DVR") means that it can receive the TiVo Basic service offered and provided by TiVo for personal, non-commercial use. Your activation and continued use of the TiVo Basic service is subject to the terms and conditions of this Agreement. TiVo may at its discretion change the terms of this Agreement. Such changes shall be effective upon notification by TiVo. We encourage you to check www.tivo.com/privacy or call us for a copy of the current TiVo Basic service agreement.
2. **The TiVo Basic Service.** The TiVo Basic service consists of limited program guide information and the following features: (a) hard disk drive recording, (b) manual recording by time & channel, and (c) controlling live TV. Each of these features is part of the "TiVo Basic service." The "TiVo Basic service" means these features and any additional features and functionality that TiVo may at its discretion and from time to time offer.
3. **Changes to Your TiVo Basic Service.** TiVo may at its discretion and from time to time change, add or remove features and functionality of the TiVo Basic service or the TiVo DVR without notice. TiVo reserves the right to discontinue one, some, or all of the features of the TiVo Basic service you receive at any time at its discretion. TiVo may at its discretion discontinue the provision of software updates to certain TiVo DVRs. This means that while other

TiVo DVRs may receive continued software updates and functionality; TiVo is not required to provide such updates to your TiVo DVR. Additionally, the level of service TiVo provides may not be the same on each TiVo DVR; a given TiVo DVR may support different features and functionality, and TiVo is under no obligation to provide all features and functionality to your TiVo DVR.

4. **TiVo's Privacy Policy.** TiVo respects the privacy of your User Information (as defined in TiVo's Privacy Policy) and will not disclose any of your User Information except as permitted in TiVo's Privacy Policy. A copy of TiVo's Privacy Policy is included in the product manual and the latest version can always be found via our web site at www.tivo.com/privacy. Please read it carefully before using the TiVo Basic service. By using the TiVo Basic service, you agree to the terms and conditions of our Privacy Policy and affirm that you understand the options TiVo provides to you with regard to your User Information. TiVo will notify you of any substantial and material changes to the Privacy Policy and the latest Privacy Policy can always be accessed through our web site at www.tivo.com/privacy.
5. **NOTE:** THE PROVISION OF SECTIONS 5, 6, AND 7 OF THE TIVO PLUS SERVICE AGREEMENT ARE PART OF THIS AGREEMENT AND ARE HEREBY EXPRESSLY INCORPORATED BY REFERENCE. ANY REFERENCE TO "TIVO PLUS" IN SUCH SECTIONS IS REPLACED WITH "TIVO BASIC" FOR PURPOSES OF THIS AGREEMENT. THESE ARE MATERIAL PROVISIONS AFFECTING YOUR RIGHTS.

► Using the TiVo Basic Service

6. **NOTE:** THE PROVISIONS OF SECTIONS 8, 10 AND 13 OF THE TIVO PLUS SERVICE AGREEMENT ARE PART OF THIS AGREEMENT AND ARE HEREBY EXPRESSLY

INCORPORATED BY REFERENCE. ANY REFERENCE TO “TIVO PLUS” IN SUCH SECTIONS IS REPLACED WITH “TIVO BASIC” FOR PURPOSES OF THIS AGREEMENT. THESE ARE MATERIAL PROVISIONS AFFECTING YOUR RIGHTS.

7. **Using the TiVo Basic Service.** You may access and use the TiVo Basic service only with a TiVo DVR that is authorized to receive the TiVo Basic service and you agree not to tamper with or otherwise modify your TiVo DVR. The TiVo Basic service is provided for your personal, non-commercial use, and may not be resold, in whole or in part. You may not transfer the TiVo Basic service to another DVR. By using the TiVo Basic service, you agree to receive all software updates and upgrades that TiVo sends to your TiVo DVR. If your TiVo DVR accesses the TiVo Basic service, you acknowledge and agree that you are a user of the TiVo Basic service and are bound by the terms of this Agreement.
8. **Termination of Service.** Notwithstanding anything to the contrary in this Agreement, TiVo retains the absolute right to immediately suspend or terminate your use of the TiVo Basic service, and terminate this Agreement, if you breach any provision in this Agreement, if you misuse the TiVo Basic service, and/or if you alter your TiVo DVR or use the TiVo Basic service in such a manner as to infringe upon the intellectual property rights of TiVo or any third party. In addition, TiVo reserves the right to terminate your use of the TiVo Basic service and this Agreement for any other reason or no reason if TiVo gives you at least 30 days advance notice of such termination.
9. **The TiVo Plus Service.** If you choose to activate the TiVo Plus service, this Agreement shall terminate immediately upon such activation and the terms and conditions of the TiVo Plus service agreement shall apply.

► **Ownership, Open Source Software, Disclaimers and Liability Limitations**

10. **NOTE:** THE PROVISIONS OF SECTIONS 17, 18, 19, 20 AND 21 OF THE TIVO PLUS SERVICE AGREEMENT ARE PART OF THIS AGREEMENT AND ARE HEREBY EXPRESSLY INCORPORATED BY REFERENCE. ANY REFERENCE TO “TIVO PLUS” IN SUCH SECTIONS IS REPLACED WITH “TIVO BASIC” FOR PURPOSES OF THIS AGREEMENT. WITH RESPECT TO INCORPORATED SECTION 21, “THE AGGREGATE AMOUNT YOU PAID TO TIVO IN THE PRECEDING TWELVE MONTHS” IS REPLACED BY “THE AGGREGATE AMOUNT OF FIFTY DOLLARS (US\$50.00)”. THESE ARE MATERIAL PROVISIONS AFFECTING YOUR RIGHTS.

► **General**

11. **Miscellaneous.** This Agreement will be governed by the laws of the State of California as such laws apply to agreements between California residents performed entirely within California. The United Nations Convention on Contracts for the International Sale of Goods does not apply to this Agreement. You and TiVo agree to submit to the exclusive personal jurisdiction of the courts located within the county of Santa Clara, California. If any provision of this Agreement is invalid or unenforceable under applicable law, such provision will be deemed modified to the extent necessary to render such provision valid and enforceable and the other provisions of this Agreement will remain in full force and effect. The official text of this Agreement or notice submitted hereunder shall be in English. In the event of any dispute concerning the construction or meaning of this Agreement, reference shall be made only to this Agreement as written in English and not to any translation into another language. This document represents the entire agreement governing your use of the TiVo Basic

service and supersedes any prior or contemporaneous written or oral statements by TiVo or its representatives or resellers. TiVo's failure to enforce any of the terms of this Agreement shall not constitute a waiver or relinquishment of TiVo's right to do so at any time. Sections 6 (but only with respect to incorporated Section 10), 7 ("Using the TiVo Basic Service"), 10 and 11 ("Miscellaneous") of

this Agreement shall survive any termination or expiration of this Agreement.

BY USING THE TIVO BASIC SERVICE, I REPRESENT THAT I HAVE READ AND UNDERSTOOD THIS ENTIRE AGREEMENT AND I AGREE TO ALL THE TERMS OF THIS AGREEMENT AS STATED ABOVE.

TiVo Basic Service Agreement v20030522A

► TiVo Plus Service Agreement

Welcome to TiVo and the TiVo Plus service! This agreement explains the terms and conditions that will apply to your use of the TiVo Plus service and constitutes a legally binding agreement between you and TiVo Inc. ("TiVo"). By using the TiVo Plus service, you agree to all the terms and conditions in this agreement ("Agreement").

► The TiVo Plus Service and the Privacy Policy

1. **Terms of Service.** The TiVo logo on your Pioneer DVD Recorder with TiVo (referred to in this TiVo Plus Service Agreement as your "TiVo DVR") means that it can receive the TiVo Plus service offered and provided by TiVo for personal, non-commercial use on a subscription basis. Your activation and continued use of the TiVo Plus service is subject to the terms and conditions of this Agreement. TiVo may at its discretion change the terms of this Agreement. Such changes shall be effective upon notification by TiVo. We encourage you to check www.tivo.com/privacy or call us for a copy of the current TiVo Plus service agreement. If you are dissatisfied with any changes to this Agreement, you may cancel your use of the TiVo Plus service as provided in Section 15 ("Termination of Service").
2. **The TiVo Plus Service.** The TiVo Plus service consists of program guide information and the following features: (a) Season Pass™ — automatically finds and records every episode of a series all season

long; (b) WishList™ — finds and records programs that feature your favorite actor, director, team or even topic; (c) Smart Recording — automatically detects program line-up changes for your cable/satellite provider and adjusts recording times so you don't have to worry about the details; (d) TiVo Suggestions — TiVo can be programmed to suggest and auto-record programs that may match your interests; and (e) Parental Controls—lock channels or set ratings limits based on content. Each of these features is part of the "TiVo Plus service." The "TiVo Plus service" means these features and any additional features and functionality that TiVo may at its discretion and from time to time offer.

3. **Changes to Your TiVo Plus Service.** TiVo may at its discretion and from time to time change, add or remove features and functionality of the TiVo Plus service or the TiVo DVR without notice. If you are dissatisfied with any such changes to the TiVo Plus service, you may immediately cancel your use of the TiVo Plus service as provided in Section 15 ("Termination of Service"). TiVo reserves the right to discontinue one, some, or all of the features of the TiVo Plus service you receive at any time at its discretion. TiVo may at its discretion discontinue the provision of software updates to certain TiVo DVRs. This means that while other TiVo DVRs may receive continued software updates and functionality; TiVo is not required to provide such updates to your TiVo DVR. Additionally,

the level of service TiVo provides may not be the same on each TiVo DVR; a given TiVo DVR may support different features and functionality, and TiVo is under no obligation to provide all features and functionality to your TiVo DVR.

4. **TiVo's Privacy Policy.** You must provide us with accurate and complete information when you activate your TiVo Plus service. TiVo reserves the right to terminate your account if you give TiVo inaccurate or incomplete information. TiVo respects the privacy of your User Information (as defined in TiVo's Privacy Policy) and will not disclose any of your User Information except as permitted in TiVo's Privacy Policy. A copy of TiVo's Privacy Policy is included in the product manual and the latest version can always be found via our web site at www.tivo.com/privacy. Please read it carefully before using the TiVo Plus service. By using the TiVo Plus service, you agree to the terms and conditions of our Privacy Policy and affirm that you understand the options TiVo provides to you with regard to your User Information. TiVo will notify you of any substantial and material changes to the Privacy Policy and the latest Privacy Policy can always be accessed through our web site at www.tivo.com/privacy.
5. **We Don't Control the Nature of Television!** The TiVo Plus service gives you the ability to see and record televised programs over which TiVo exercises no editorial or programming control ("Third Party Content"). You understand that (a) TiVo does not guarantee the access to, recording, or viewing of any particular program, (b) programming is not under TiVo's control, (c) cable/satellite providers may make program line-up changes too quickly for your TiVo DVR to adjust recording times and this means shows affected by such changes will not be recorded properly or at all, (c) TiVo is not responsible for and has no editorial control over any Third Party Content, and (d) TiVo has no control over the distribution of programs. You agree that TiVo will have no liability

to you, or anyone else who uses your account, with regard to any Third Party Content.

6. **Television Shows Are Copyrighted.** You also understand that the Third Party Content is the copyrighted material of the third party that supplies it, is protected by U.S. copyright law and other applicable laws, and may not be reproduced, used to prepare derivative works, distributed, performed publicly or displayed publicly without the written permission of the third party that supplied it, except to the extent allowed under the "fair use" provisions of the U.S. copyright laws, other limitations on exclusive copyrights in the U.S. copyright laws, or comparable provisions of foreign laws.
7. **Copy Protection of Television Shows.** Third Party Content may be transmitted with a variety of copy protection mechanisms. These copy protection mechanisms are designed to protect the copyright interests of the relevant third party. These copy protection mechanisms may limit or prevent the ability of your TiVo DVR to display the Third Party Content or to record such Third Party Content for later viewing. You understand that TiVo does not control the decision of a third party to institute such copy protection mechanisms. You agree that TiVo will have no liability to you, or anyone else who uses your account, with regard to the failure of your TiVo DVR to display or record for later viewing any Third Party Content implementing a copy protection mechanism.

▶ **Activating and Using the TiVo Plus Service**

8. **Eligible Users.** You must be at least 18 years of age to assume the responsibilities of this Agreement. Minors may use the TiVo Plus service only if one of their parents or legal guardians assumes the responsibilities of this Agreement and thereby assumes full responsibility for the minor's use of the TiVo Plus service.
9. **Subscription Fees.** You agree to pay your subscription fee in advance. Your subscription fee will cover the TiVo Plus service

received via a TiVo DVR authorized by TiVo to enable the TiVo Plus service. You have a choice of subscription payment options that may change over time. You may switch payment options at the end of each period. If for any reason you need to reactivate your subscription, you may be charged a reactivation fee. If you are signing up for the TiVo Plus service under a promotional subscription fee, some additional restrictions may apply. Whatever your subscription payment option, your subscription fee does not include any services, features or functionality other than the TiVo Plus service.

10. **Telephone Access and Possible Charges.** The TiVo Plus service is accessed through a standard telephone line and is available as a local call in most areas. In some areas, local and long-distance toll charges may apply. The TiVo Plus service may also be available through the Internet with a broadband connection. However, TiVo does not make any assurances about the availability or functionality of the TiVo Plus service over a broadband connection. Firewall protection is strongly advised for any broadband Internet connections to protect your TiVo DVR from viruses and other harmful things. You are responsible for any telephone or broadband service charges incurred as a result of using or accessing the TiVo Plus service and acknowledge and agree that you shall be solely responsible for all disputes with any telephone company or Internet service provider related to the same.
11. **Payment Authorization.** If you choose a subscription option with recurring payments, you agree that TiVo may automatically charge the subscription fee to your credit or charge card at the beginning of each period. Your TiVo Plus service access will not be established until TiVo has verified that the credit card information you provide us for payment is accurate and that your credit card account is in good standing. TiVo may, as necessary, extend the expiration date of your credit card in order to ensure continued service. TiVo may, at its discretion, change the TiVo Plus service fees from time to time, and

charge fees (which TiVo may also change) for features and functionalities that are not a part of the TiVo Plus service. TiVo will notify you 30 days in advance of any fee changes or new fees; you may obtain the fees currently in effect at any time by contacting TiVo Customer Service at 1-877-367-8486. TiVo reserves the right to suspend or terminate your TiVo Plus service without notice upon rejection of any credit card charges or if your card issuer (or its agent or affiliate) seeks return of payments previously made to TiVo when TiVo believes you are liable for the charges. You agree to pay a late charge on all amounts due which remain unpaid for 30 days. The late charge will equal 1.5% of the past due amount, or the highest rate allowed by law, per month until paid. Such rights are in addition to and not in lieu of any other legal right or remedies available to TiVo. TiVo reserves the right to refer your account to a third party for collection in the event of an ongoing default.

12. **Using the TiVo Plus Service.** You may access and use the TiVo Plus service only with a TiVo DVR that is authorized to receive the TiVo Plus service and you agree not to tamper with or otherwise modify your TiVo DVR. The TiVo Plus service is provided for your personal, non-commercial use, and may not be resold, in whole or in part. Except as expressly provided in this Agreement, you may not transfer the TiVo Plus service. By using the TiVo Plus service, you agree to receive all software updates and upgrades that TiVo sends to your TiVo DVR. If your TiVo DVR accesses the TiVo Plus service (regardless of your payment or subscription status), you acknowledge and agree that you are a user of the TiVo Plus service and are bound by the terms of this Agreement.
13. **Advertising and Promotions.** The TiVo Plus service is advertiser supported. The hard disk drive of your TiVo DVR contains reserved space in addition to the advertised recording capacity. TiVo reserves the right to send content (including advertising and promotional material) to such reserved portions of your TiVo DVR's hard disk drive as part of the TiVo Plus service. In order to send such content,

- you agree that TiVo may tune your TiVo DVR to a particular channel at a particular time.
14. **Definition of Product Lifetime Subscription.** A “Product Lifetime Subscription” to the TiVo Plus service covers the life of the TiVo DVR you buy — not the life of the subscriber. The Product Lifetime Subscription accompanies the TiVo DVR in case of ownership transfer. The subscription remains in effect if the TiVo DVR needs to be repaired or replaced due to a malfunction (see manufacturer or retailer warranty details) or even if you upgrade your TiVo DVR to increase storage capacity (though such upgrades, if not performed by a TiVo-authorized third party, will void the warranty on your TiVo DVR and constitute a breach of this Agreement). Because a Product Lifetime Subscription is linked to a particular TiVo DVR, you may not transfer it to any other TiVo DVR unless all the following conditions apply: (a) the TiVo DVR is being replaced pursuant to the manufacturer’s or retailer’s warranty; and (b) the TiVo DVR being replaced is of the same make and model as the replacement TiVo DVR; and (c) you provide us with a proof of replacement by the manufacturer or retailer. TiVo reserves the right to charge you a fee to transfer Product Lifetime Service from a TiVo DVR being replaced to a replacement TiVo DVR. Each TiVo DVR purchased requires its own TiVo Plus service subscription and activation. Of course, hardware products don’t last forever and their lifespan will vary. TiVo makes no warranties or representations as to the expected lifetime of the TiVo DVR (aside from the manufacturer’s or retailer’s warranty).
15. **Termination of Service.** You may terminate your account, this Agreement, and your right to use the TiVo Plus service, at any time and for any reason or no reason, by contacting TiVo Customer Service at 1-877-367-8486. The TiVo Plus service will be terminated within 24 hours after your call and unused subscription fees are nonrefundable. Notwithstanding anything to the contrary in this Agreement, TiVo retains the absolute right to immediately suspend or terminate your account, and terminate this Agreement, if the charges to your credit card for the fees described in Section 9 (“Subscription Fees”) and Section 11 (“Payment Authorization”) are refused for any reason, if you breach any provision in this Agreement, if you misuse the TiVo Plus service, and/or if you alter your TiVo DVR or use the TiVo Plus service in such a manner as to infringe upon the intellectual property rights of TiVo or any third party. In addition, TiVo reserves the right to terminate your account and this Agreement for any other reason or no reason if TiVo gives you at least 30 days advance notice of such termination. Upon any such termination of your account, you will remain obligated to pay all outstanding fees and charges relating to your use of the TiVo Plus service before termination.
16. **The TiVo Basic Service.** Your TiVo DVR may be eligible to receive the TiVo Basic service. If your TiVo DVR is eligible to receive the TiVo Basic service and you choose to terminate your TiVo Plus service, this Agreement shall terminate immediately upon such termination and the terms and conditions of the TiVo Basic service agreement shall apply. **NOTE:** Your TiVo DVR may not be eligible to receive the TiVo Basic service, in which case Section 15 (“Termination of Service”) and not this section, applies to you. Consult your *User’s Guide* to determine if your TiVo DVR is eligible to receive the TiVo Basic service.

► **Ownership, Open Source Software, Disclaimers and Liability Limitations**

17. **Title to Software and Intellectual Property.** You may need to use certain software programs to use or have full access to certain features of the TiVo Plus service. You received certain software with the purchase of the TiVo DVR and other software programs may be provided to you by TiVo from time to time, which you are obligated to accept. Your use of such software is subject to the terms of this Agreement. TiVo retains title to and ownership of all the TiVo

- software and certain intellectual property rights in the TiVo DVR. TiVo also retains ownership of all TiVo copyrights and trademarks. In the case of third party software delivered by TiVo to the TiVo DVR, the applicable third party retains title to and ownership of its software, copyrights and trademarks. Any attempt to disassemble, decompile, create derivative works of, reverse engineer, modify, sublicense, distribute or use for other purposes either the TiVo DVR or software of this system is strictly prohibited, except as expressly set forth in Section 18 (“Open Source Software”).
18. **Open Source Software.** Certain components of the TiVo software are subject to the GNU General Public License or other so-called open source licenses (“Open-Source Software”). Open Source Software is not subject to the restrictions in the last sentence of Section 17 (“Title to Software and Intellectual Property”), and is subject to the GNU General Public License (“GPL”) or other license terms, as applicable. In compliance with the terms of the GPL, TiVo makes its modifications to Open Source Software that TiVo uses, modifies and distributes pursuant to the GPL available to the public in source code form at www.tivo.com/source. You are free to use, modify and distribute Open Source Software that is subject to the GPL so long as you comply with the terms of the GPL (available in the product manual or at www.gnu.org/copyleft/gpl.html).
19. **Indemnity.** YOU AGREE TO DEFEND, INDEMNIFY AND HOLD HARMLESS TIVO FROM AND AGAINST ANY AND ALL CLAIMS, PROCEEDINGS, INJURIES, LIABILITIES, LOSSES, COSTS AND EXPENSES (INCLUDING REASONABLE ATTORNEYS’ FEES), INCLUDING, BUT NOT LIMITED TO, CLAIMS ALLEGING NEGLIGENCE, COPYRIGHT INFRINGEMENT AND/OR TRADEMARK INFRINGEMENT AGAINST TIVO OR THE TIVO PLUS SERVICE, RELATING TO OR ARISING OUT OF YOUR BREACH OF ANY TERM OF THIS AGREEMENT, YOUR MISUSE OF THE TIVO PLUS SERVICE, OR YOUR UNAUTHORIZED MODIFICATION OR ALTERATION OF THE TIVO DVR OR RELATED SOFTWARE (OTHER THAN AS EXPRESSLY SET FORTH IN SECTION 18 (“OPEN SOURCE SOFTWARE”)).
20. **Warranty Disclaimer.** YOU UNDERSTAND AND AGREE THAT THE TIVO PLUS SERVICE IS PROVIDED ON AN “AS IS” AND “AS AVAILABLE” BASIS. TIVO MAKES NO WARRANTY THAT THE TIVO PLUS SERVICE WILL MEET YOUR REQUIREMENTS, ALLOW YOU TO RECORD OR VIEW ANY PARTICULAR PROGRAMMING, OR THAT USE OF THE TIVO PLUS SERVICE WILL BE UNINTERRUPTED, TIMELY, SECURE, OR ERROR-FREE; NOR DOES TIVO MAKE ANY WARRANTY AS TO THE ACCURACY OR RELIABILITY OF ANY INFORMATION OBTAINED THROUGH THE TIVO PLUS SERVICE (INCLUDING THIRD PARTY CONTENT), THAT ANY DEFECTS IN THE TIVO PLUS SERVICE WILL BE CORRECTED OR THAT THE TIVO DVR OR TIVO PLUS SERVICE WILL BE COMPATIBLE WITH ANY OTHER SPECIFIC HARDWARE OR SERVICE. FURTHER, TIVO DOES NOT WARRANT THAT THE TIVO PLUS SERVICE OR THE TIVO SERVERS THAT PROVIDE YOU WITH DATA AND CONTENT ARE FREE OF VIRUSES OR OTHER HARMFUL COMPONENTS. YOU (AND NOT TIVO) ASSUME THE ENTIRE COST OF ALL NECESSARY MAINTENANCE, REPAIR OR CORRECTION. TIVO ALSO ASSUMES NO RESPONSIBILITY, AND SHALL NOT BE LIABLE FOR ANY DAMAGES TO, OR VIRUSES THAT MAY INFECT YOUR TIVO DVR, TIVO SOFTWARE, OR OTHER HARDWARE. TIVO AND ITS SUPPLIERS DISCLAIM ALL WARRANTIES OF ANY KIND, WHETHER EXPRESS, IMPLIED, OR STATUTORY, REGARDING THE TIVO PLUS SERVICE OR TIVO SOFTWARE, INCLUDING ANY IMPLIED WARRANTY OF TITLE, MERCHANTABILITY, FITNESS FOR A PARTICULAR

PURPOSE, OR NON-INFRINGEMENT OF THIRD PARTY RIGHTS. Because some jurisdictions do not permit the exclusion of implied warranties, the last sentence of this section may not apply to you.

21. **Limitations of TiVo's Liability.** IN NO EVENT WILL TIVO OR ITS SUPPLIERS BE LIABLE TO YOU OR ANY THIRD PARTY FOR ANY LOST PROFITS, USE OF USER INFORMATION, LOSS OF DATA, BUSINESS INTERRUPTION, OR OTHER INDIRECT, CONSEQUENTIAL, SPECIAL, OR INCIDENTAL DAMAGES OF ANY NATURE ARISING FROM OR RELATING TO YOUR USE OF THE TIVO PLUS SERVICE OR USE OF THE TIVO PLUS SERVICE THROUGH YOUR ACCOUNT BY ANYONE ELSE, EVEN IF TIVO HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IN NO CASE WILL TIVO'S TOTAL CUMULATIVE LIABILITY TO YOU AND ANYONE WHO USES THE TIVO PLUS SERVICE THROUGH YOUR ACCOUNT, FOR ANY AND ALL CLAIMS UNDER ANY THEORY OF LAW, EXCEED THE AGGREGATE AMOUNT YOU PAID TO TIVO IN THE PRECEDING TWELVE MONTHS. YOU UNDERSTAND THAT THESE LIMITATIONS OF TIVO'S AND TIVO'S SUPPLIERS' LIABILITY ARE A FUNDAMENTAL PART OF THIS AGREEMENT. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. Additionally, this provision is not intended to limit TiVo's liability in the event of TiVo's willful or intentional misconduct. Moreover, if TiVo mistakenly or wrongfully overcharges your account, this section does not limit TiVo's obligation to refund such mistakenly or wrongfully overcharged amounts.

► General

22. **Miscellaneous.** This Agreement will be governed by the laws of the State of California as such laws apply to agreements between

California residents performed entirely within California. The United Nations Convention on Contracts for the International Sale of Goods does not apply to this Agreement. You and TiVo agree to submit to the exclusive personal jurisdiction of the courts located within the county of Santa Clara, California. If any provision of this Agreement is invalid or unenforceable under applicable law, such provision will be deemed modified to the extent necessary to render such provision valid and enforceable and the other provisions of this Agreement will remain in full force and effect. The official text of this Agreement or notice submitted hereunder shall be in English. In the event of any dispute concerning the construction or meaning of this Agreement, reference shall be made only to this Agreement as written in English and not to any translation into another language. This document represents the entire agreement governing your use of the TiVo Plus service and supersedes any prior or contemporaneous written or oral statements by TiVo or its representatives or resellers. TiVo's failure to enforce any of the terms of this Agreement shall not constitute a waiver or relinquishment of TiVo's right to do so at any time. Sections 9 ("Subscription Fees"), 10 ("Telephone Access and Possible Charges"), 11 ("Payment Authorization"), 12 ("Using the TiVo Plus Service"), 17 ("Title to Software and Intellectual Property"), 18 ("Open Source Software"), 19 ("Indemnity"), 20 ("Warranty Disclaimer"), 21 ("Limitations of TiVo's Liability"), and 22 ("Miscellaneous") shall survive any termination or expiration of this Agreement.

BY USING THE TIVO PLUS SERVICE, I REPRESENT THAT I HAVE READ AND UNDERSTOOD THIS ENTIRE AGREEMENT AND I AGREE TO ALL THE TERMS OF THIS AGREEMENT AS STATED ABOVE.

TiVo Plus Service Agreement v20030522A

APPENDIX A

Linux Information

Linux Source Notice	166
GNU General Public License	166

Linux Source Notice

The Pioneer DVD Recorder with TiVo is powered by the Linux operating system. The machine-readable copy of the corresponding source code is available for the cost of distribution. Please visit www.tivo.com/source for more information.

GNU General Public License

Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc.
59 Temple Place, Suite 330, Boston, MA 02111-1307 USA

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software—to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Library General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that

you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

GNU GENERAL PUBLIC LICENSE

Terms and conditions for copying, distribution and modification.

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The “Program”, below, refers to any such program or work, and a “work based on the Program” means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term “modification”.) Each licensee is addressed as “you”.

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.

b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.

c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those

sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

- a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
- b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
- c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License.

However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so

as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new

versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and “any later version”, you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

No Warranty

11. Because the program is licensed free of charge, there is no warranty for the program, to the extent permitted by applicable law. Except when otherwise stated in writing the copyright holders and/or other parties provide the program “as is” without warranty of any kind, either expressed or implied, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose. The entire risk as to the quality and performance of the program is with you. Should the program prove defective, you assume the cost of all necessary servicing, repair or correction.

12. In no event unless required by applicable law or agreed to in writing will any copyright holder, or any other party who may modify and/or redistribute the program as permitted above, be liable to you for

damages, including any general, special, incidental or consequential damages arising out of the use or inability to use the program (including but not limited to loss of data or data being rendered inaccurate or losses sustained by you or third parties or a failure of the program to operate with any other programs), even if such holder or other party has been advised of the possibility of such damages.

End of terms and conditions.

How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the “copyright” line and a pointer to where the full notice is found.

<one line to give the program’s name and a brief idea of what it does.>

Copyright (C) <year> <name of author>

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 59 Temple Place, Suite 330, Boston, MA 02111-1307 USA

Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this when it starts in an interactive mode:

Gnomovision version 69, Copyright (C) year name of author

Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type ‘show w’.

This is free software, and you are welcome to redistribute it under certain conditions; type ‘show c’ for details.

The hypothetical commands ‘show w’ and ‘show c’ should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than ‘show w’ and ‘show c’; they could even be mouse-clicks or menu items—whatever suits your program.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a “copyright disclaimer” for the program, if necessary. Here is a sample; alter the names:

Yoyodyne, Inc., hereby disclaims all copyright interest in the program ‘Gnomovision’ (which makes passes at compilers) written by James Hacker.

<signature of Ty Coon>, 1 April 1989

Ty Coon, President of Vice

This General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Library General Public License instead of this License.

Index

Numbers

3D noise reduction 65

A

adapters

- USB network 103
- wired (Ethernet) 103
- wireless 103

ADVANCE button 10

APG 123

audio

- secondary audio program (SAP) 50
- settings 49
- sound effects volume and 50
- television audio options 50
- troubleshooting 135–136

auto re-lock option 58

B

BACK button 10

blue screen 124

broadband connection 102

browse by channel 83

browse by time 82

C

cable lineup

- changing 50
- Guided Setup and 5

call waiting prefix 62

cancel

- recordings 78
- Season Pass 78

changing

- passwords 59
- recording options 78

channel banner 51

channel changing 51

- Guided Setup and 6

channel lists

- Channels You Receive 80
- customizing 51
- favorites 80

channel settings 50

channels

- locking channels
- See Parental Controls.
- troubleshooting 122–125

Channels You Receive

- customize channels and 51
- Guided Setup and 6

clear

- program information 68
- thumb ratings 68

clear and delete everything 68

conflicts

- questions about 131
- resolving 74

connection to Recorder 65

- Guided Setup and 6

connections

cable with a box only 7

satellite and antenna 7

satellite and cable with a box 7

satellite and cable without a box 7

satellite only 7

creating a manual recording 24

custom channel list 51

customer support 118

online 118

customizing

TiVo Live Guide 79

D

DHCP Client ID 113

dial prefix, setting 62

dial tone detection, setting 63

dial-in number

changing 61

Guided Setup and 4

dialing options 61–63

disk capacity 64, 67

DNS address 115

Dolby Digital output, setting the 49

DRC (Dynamic Range Control) 49

DTS (Digital Theater Systems) output, setting 50

DVD settings 52

DVR

definition of vi

Dynamic Range Control (DRC) 49

F

favorite channels 80
filtering TiVo Live Guide 80
forward
 frame forward 10
frame back 10
frame forward 10
FREE trial of TiVo Plus 26

G

gateway address 115
GNU General Public License 166
grouping programs 92
guide options
 using 79
Guided Setup
 cable lineup and 5
 cable providers and 5
 channel changing and 6
Channels You Receive and 6
connection to Recorder 6–7
connection to satellite box 6
dial-in number and 4
e-mail address and 4
introduction to 3
IR Code list and 8
phone dialing option
 See dialing options.
program call and 8
repeating 68
satellite providers and 5

H
I

setup call and 4
tips and troubleshooting 4–8
ZIP code and 4

H

Home Media Option 96

home network
 connecting 104
 settings 108
 troubleshooting 142–145

I

icons
 See inside back cover.
INSTANT REPLAY button 10
IP address 114
Ipreview 19
IR Code List
 Guided Setup and 8

K

keep at least 76
keep at most 75
Keep at Most=5 74
keep until 76
Keep Until... 29

L

Linksys
 USB100TX adapter 103
 WUSB11 adapter 103
Linux Source Notice 166

live TV

definition of vi
recording from 23
troubleshooting 126–127
local and long distance toll charges 121

M

manual recording, creating 24
messages 48
MPG 123
multi-room viewing 100
music
 file types 98
 playing 99
music & photos 98

N

networking
 troubleshooting 141–145
No duplicates within 28 days 74
Now Playing 29
 troubleshooting 132–133

O

online support 118

P

Parental Controls 53–59
 auto re-lock 58
 channel lock 58
 troubleshooting 134

- passwords
 changing 59
- PAUSE button 10
- PCM output, setting 49
- periodic connection
 charge 121
 troubleshooting 119–121
- phone and network
 settings 59
- phone avail. detection 63
- phone call
 eliminating 102
- phone connection, troubleshooting 119–121
- photos
 file types 98
 viewing 99
- Pick Programs to Record
 See also To Do List.
 troubleshooting 128–130
- PLAY button 10
- playing DVDs & CDs
 questions about 137
- program call
 Guided Setup and 8
- program information
 clearing 68
 definition of vi
- programs
 grouping 92
 sorting 92
- progressive format - DVD 65
- progressive format - TV 66
- progressive output, setting 65
- progressive-scan TVs, compatibility 66
- R**
- rating settings
 MMPA definitions 57
 movies and 55
 TV content and 55
 TV movies and 55
 TV ratings definitions 57
- record one channel, watch another 69
- record quality 75
- Recorder
 connection to 65
- recording capacity 64, 67
- recording DVDs
 questions about 138
- Recording History 28
- recording options
 changing 78
 setting 75
- recordings
 cancel 78
- remote control
 responding to Pioneer A/V Receiver
 remotes 125
 troubleshooting 122–125
- remote scheduling 97
- reset DVD settings 68
- resolving conflicts 74
- restart or reset system 68
- restart the Recorder 68
- RF video input 66
- router address 115
- S**
- SAP (secondary audio program) 50
- satellite receiver, with serial control 123
- search by title 81
- Season Pass 73, 76
 cancel 78
- Season Pass Manager 77
- serial control cable 123
- service agreements
 TiVo Basic 156
 TiVo Plus 158
- setting recording options 75
- settings 49–66
 audio 49
 channels 50
 DVD 52
 phone and network 59
 See also Parental Controls.
 See also video recording quality.
 TCP/IP 111
 video 65
- show type 75
- Showcases 18
- sleep 69
- slow-motion replay 10

sorting programs 92
sound effects volume 50
sound effects, changing volume of 50
start recording 76
status bar 11
stereo 50
stop recording 76
subnet mask 115
System Information 67

T

TCP/IP
 concepts 112
 settings 111
television audio 50
thumb ratings
 clearing 68
time
 how the clock is set 129
TiVo Basic service 2, 139
 agreement 156
TiVo Central 22
TiVo Live Guide
 customizing 79
 filtering 80
 looking ahead in 80
TiVo Plus service 139
 activating 2
 agreement 158
FREE trial 26

TiVo Privacy Policy 149
 summary 148
TiVo service
 activating 8
 definition of vi
 questions about 139
TiVo Suggestions 90
TiVolution Magazine 18
To Do List 28
tone/pulse 62
troubleshooting screens
 channels 67
 network 67
 parental controls 67
 phone 67
 transfer 67
TV aspect ratio 66

U

upcoming episodes
 viewing 78
using
 guide options 79

V

VCR Plus+, record using 25
VCR, copying programs to 93
VCR, recording from 25
video
 See also video recording quality.

troubleshooting 135
video camera, recording from 25
video recording quality 75
 setting default 63
video settings 65
View Recording History 28
view upcoming episodes 78
viewing habits 140
volume, sound effects and 50

W

watching television while recording 69
WEP 109
wide screen format 66
wireless passwords 110
WishList searches 84
 actor 86
 auto-recording 89
 category 86
 creating 86
 director 86
 keyword 86
 title 86
 using * 87
 using wildcards 87

Glossary of Icons



These appear when you press THUMBS UP™ or THUMBS DOWN™. You can give a program up to three THUMBS UP or three THUMBS DOWN.



Ipreview™ icons appear when an option—such as automatically scheduling an upcoming program or watching an additional program segment—is available. Press SELECT or THUMBS UP to choose the option.

Now Playing

(These icons appear beside recorded programs.)



(Green) This program will be saved until you delete it.



(Yellow) In less than one day, this program may be deleted to make room for other programs you have requested, but only if space is needed.



(Yellow with exclamation mark) At any time, this program may be deleted to make room for other programs you have requested, but only if space is needed.



(Red with black border) This program is currently being recorded.



This program is a TiVo® Suggestion. TiVo Suggestions are recorded on empty space and are the first programs to be deleted when space is needed.



"Plain" folder — contains more than one episode of the same series.



Folder with red dot — for any group that includes a program that is currently recording or transferring.



Folder with blue star — contains one or more program(s) recorded by a WishList search.



Folder with Thumbs Up — contains all programs that were recorded as TiVo Suggestions.



DVR — for a DVR on your network. Though you may see other DVRs on your network, without Home Media Option, you will not be able to see programs on them.

TiVo Central, Showcases, or TiVolution Magazine



Indicates a selection that has some special video content.



Select to watch a special preview or visit a Showcase.



Indicates a special promotional offer from TiVo.

Hints & Shortcuts

The **TiVo** button goes to TiVo Central. Press it again to go to Now Playing.

Press **DVD** to go to the Recorder's DVD screen.

Press **LIVE TV/GUIDE** to switch between live TV and the TiVo Live Guide. Press once to watch live TV, then again to see the TiVo Live Guide, and then again to switch back to live TV.

Press **ENTER** to switch between the channel you are currently watching and the last channel viewed.

The **DVD Menu Buttons** may work differently depending on the DVD. While a DVD is playing:

Press **TOP MENU** to go to the Top Menu on the DVD.

Press **MENU** to display a menu below the Top Menu, if any.

Press **RETURN** to return to the previous DVD menu (current settings are maintained). Use **RETURN** when you do not wish to change the option setting in a DVD menu.

Inserting Batteries in the Remote Control

Hold the remote with the battery door facing you. Place your thumb in the depression of the door and slide the door towards you.

Insert two AA batteries (supplied). Be sure to match the + and - marks on the batteries to the + and - marks in the compartment.

Replace the battery door by sliding it back into the case with the tabs towards the rear of the compartment. You'll hear a click when it's securely back in place.

When disposing of used batteries, please comply with governmental regulation or environmental public institution's rules that apply in your country/area.

INFO brings up the TiVo channel banner. Press the **RIGHT arrow** to switch among the three versions of the banner, each with a different amount of information.

Press **FWD** (fast forward) or **BACK** (rewind) up to 3 times for 3 speeds. Press a fourth time (or press **PLAY**) to resume normal play.

During DVD/CD playback, press **SKIP BACK** to go to the beginning of the current chapter (track), and again to go to the previous chapter (track). Press **SKIP FWD** to go to the next chapter (track).

CHAN UP/DOWN does more than change the channel—it also pages up or down through lists of programs or menu items.

INSTANT REPLAY replays the last 8 seconds of a program.

Press **ADVANCE** when you're watching "behind" live TV (e.g., if you paused live TV and later resumed watching from the paused spot), to catch up to the live broadcast. In a recorded program, press it once to jump to the end of the program, then again to jump to the beginning. Press it while your fast forwarding or rewinding to jump to the next tick mark on the status bar.

Press the **VCR Plus+** button to enter the PlusCode programming number.

Press **CLEAR** to delete a title in a list (like Now Playing) or to hide things that aren't part of the program you're watching (like the TiVo channel banner).

You can program the **TV POWER**, **VOLUME**, **MUTE**, and **TV INPUT** buttons to control your TV and A/V equipment. See the *Installation Guide* for details.



TiVo Central, Showcases, or TiVolution Magazine (cont.)

This icon appears if a playable DVD is inserted.

This icon appears if a playable CD is inserted.

This icon appears if a copy to DVD is in progress. All DVD functions are unavailable (playing a disc, copying to another DVD, etc.).

To Do List & View Upcoming Episodes

(These icons appear beside programs scheduled to be recorded.)

Program is an individual recording (not part of a Season Pass™ or WishList™). In other places, it means an item has been selected.

Program will be recorded as part of a Season Pass.

Program will be recorded as part of a WishList.

(This icon appears if you have the Recorder set to Progressive Output.) By default, the Recorder automatically detects whether a program viewed in progressive (high quality video) format should be shown in Film or Video format. In very rare circumstances, auto detection may result in poor image quality for programs that should be displayed in Video format (relatively few programs should use Film format). In these cases, you can select this icon to turn off auto-detection for an individual program.

Channel Banner

(These icons appear in the large channel banner.)

Select to start or stop a recording.

Select to display or turn on Parental Controls.

Select to read new messages.

Select to search for a specific title on the DVD or a specific chapter or time within a title.

Select to choose a different Repeat setting for a DVD.

Appears if you are watching a DVD with multiple camera angles. Select to change the camera angle.

Select to change the audio track and subtitle language settings for the current disc.